DOCUMENT RESUME

ED 146 435 08 CE 013 643

AUTHOR	Marson, Arthur A.; And Others
TITLE	Cost Benefit Model Development. Final Report.
INSTITUTION	Wisconsin State Board of Vocational, Technical, and Adult Education, Madison.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.
BUREAU NO	10-029-151-227
PUB DATE	Jul 77
NOTE	203p.
EDRS PRICE	MF-$0.83 HC-$11.37 Plus Postage.
DESCRIPTORS	*Adult Education; *Cost Effectiveness; Economic Research; Educational Finance; Educational Research; Instructional Student Costs; *Models; *Noncredit Courses; Post Secondary Education; Program Budgeting; Program Costs; Program Effectiveness; Program Evaluation; *Technical Education; *Vocational Education
IDENTIFIERS	Wisconsin

ABSTRACT

A one-year cost benefit analysis study was conducted by a consortium of technical institutes, and two cost benefit models were developed and refined for evaluating benefits and costs of full-time vocational technical programs and aidable, noncredit adult education courses. The models were tested on a sample of nine full-time vocational technical programs and sixty-three adult education courses which reflected a cross-section of instructional areas in vocational technical education. Findings were that benefits from vocational technical education programs and aidable, noncredit education courses outweigh the costs of such courses for both the student and for society in general, with the cost benefit ratio being 2.7 to 1.00 for society and 2.17 to [illegible].00 for an individual student. Six recommendations were offered and included further research being done on the noneconomic costs and benefits of vocational technical education. (Results of the test programs are presented in this report, as well as the models. Correspondence and sample cost benefit and survey forms are appended.) (BL)

Documents acquired by ERIC include many informal unpublished materials not available from other sources. ERIC makes every effort to obtain the best copy available. Nevertheless, items of marginal reproducibility are often encountered and this affects the quality of the microfiche and hardcopy reproductions ERIC makes available via the ERIC Document Reproduction Service (EDRS). EDRS is not responsible for the quality of the original document. Reproductions supplied by EDRS are the best that can be made from the original.

ED146435

FINAL REPORT

Project No. 10-029-151-227

COST BENEFIT MODEL DEVELOPMENT

Arthur A. Marson, Research Specialist
Arthur E. Weiner, Administrator-Research & Development
Dr. Robert P. Sorensen, District Director

Moraine Park VTAE District, Fond du Lac, Wisconsin

Joe Myrick, Administrator-Research & Development
Frederick Nierode, District Director

Lakeshore VTAE District, Cleveland, Wisconsin

Marvin Berg, Research Investigator
Dr. Russell C. Paulsen, Administrator-Research & Development
Lawrence B. Hoyt, District Director

North Central Technical Institute, Wausau, Wisconsin

July, 1977

The research reported herein was performed pursuant to a grant or contract with the Wisconsin Board of Vocational, Technical and Adult Education, partially reimbursed from an allocation of Federal funds from the U.S. Office of Education, U.S. Department of Health, Education and Welfare. Contractors undertaking such projects under Government sponsorships are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official State Board or U.S. Office of Education policy or position.

CE 013 643

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

TABLE OF CONTENTS

List of Tables iii

List of Illustrations. v

Acknowledgments. vi

Summary. vii

Cost Benefit Model:

Introduction. 1

Background of Cost Benefit Studies. 2

Background in Wisconsin 5

Purpose 9

Method. 10

Results of Test Programs:

Full-time Programs. 46

Adult Education Courses 75

Conclusions. 144

Recommendations. 146

Bibliography 147

Appendix 149

LIST OF TABLES

1. Cash Payback Period-Kenosha Technical Institute. 5
2. Costs-Benefits-Vocational School Graduate. 12
3. Cost Benefit Model 13
4. Moraine Park District Financial Department Coding (Cost Centers) 16
5. Engine Technology Operational Cost 17
6. 1975-76 Program FTE Totals 18
7. Benefits and Costs-Adult Education 42
8. Job Market Effect Questionnaire Results. 48
9. Cost Benefit Questionnaire Results 49
10. Engine Technology-Operational Cost 57

11. Private Economic Costs 60
12. Private Economic Benefits. 61
13. Private Noneconomic Costs. 62
14. Private Noneconomic Benefits 63
15. Social Economic Costs 64
16. Social Economic Benefits 65
17. Social Noneconomic Costs 66
18. Social Noneconomic Benefits. 67
19. Private Cost Benefit Analysis. 71
20. Social Cost Benefit Analysis 72

21. All MPTI Courses 78
22. All LTI Courses 79
23. All NCTI Courses 23
24. Mushrooms-MPTI 81
25. Animal Health Clinic-MPTI 82
26. Beekeeping in Wisconsin-MPTI 83
27. Accounting, Fund. I-LTI. 84
28. Income Tax Helps-MPTI 85
29. Personal Income Tax-NCTI 86
30. Bookkeeping-MPTI 87

31. Basic Bookkeeping-NCTI 88
32. Supervisory Training-MPTI 89
33. Trans. & Traffic Management-NCTI 90
34. Labor-Management Relations-NCTI 91
35. Prof. Display Techniques-MPTI 92
36. Checker-Cashier-NCTI 93
37. Law & Administration-LTI 94
38. Wills and Estate Planning-LTI 95
39. Introduction to Investment-NCTI 96
40. Beginning Typing-MPTI. 97

41. Typing-LTI 98
42. Secretarial Skills-MPTI. 99
43. Key Punch-NCTI 100
44. Shorthand Refresher-NCTI 101
45. Office Machines-NCTI 102

LIST OF TABLES (cont'd.)

46. Basic Real Estate-MPTI 103
47. Real Estate Principles-LTI 104
48. Real Estate, Advanced-LTI 105
49. General Sewing-MPTI 106
50. Beginning Clothing-NCTI. 107

51. Clothing I-LTI 108
52. Leisure Suits-LTI 109
53. Drapery I-NCTI 110
54. Sewing Quilts-MPTI 111
55. Microwave Cooking-LTI. 112
56. Canning & Freezing-LTI 113
57. Diet Delight-MPTI 114
58. Meat Cutting-MPTI 115
59. Interior Decorating I-NCTI 116
60. Interior Decoration-LTI. 117

61. Prospective Parents-LTI 118
62. Child Care Enrichment-MPTI 119
63. Beginning Auto Mechanics-MPTI 120
64. Auto Body Repair-MPTI 121
65. Basic Electricity-MPTI 122
66. Introduction to Electricity-LTI 123
67. FCC Communications-NCTI. 124
68. Machine Shop-NCTI 125
69. Tool Design I-LTI 126
70. Blueprint Reading, Sheetmetal-LTI 127

71. Plumbing Code & Theory-MPTI. 128
72. Beginning Welding-NCTI 129
73. Advanced Welding-NCTI 130
74. Welding, Arc-LTI 131
75. Cosmetology Review-LTI 132
76. Firearms Training-MPTI 133
77. Rights of Age-MPTI 134
78. Basic Life Support-MPTI. 135
79. Sign Language-LTI. 136

80. Creative Writing-MPTI 137
81. Reading Acceleration-LTI 138
82. Metric System-MPTI 139
83. High School Chemistry-LTI. 140
84. First Aid-MPTI 141
85. Driver Education-LTI 142
86. Defensive Driving-LTI 143

LIST OF ILLUSTRATIONS

1. Allocation of Building Costs 20
2. Cost Benefit Form-VTAE Graduates (economic) 22
3. Cost Benefit Form-High School Graduates (economic). 24
4. Employer Survey Form 27
5. Cost Benefit Form-VTAE Graduates (noneconomic) 30
6. Cost Benefit Form-High School Graduates (noneconomic) . . 32
7. Attitude Survey 34
8. Adult Education Survey Form 43

ACKNOWLEDGMENTS

A report of this magnitude would be impossible to complete without the assistance of many individuals. It is through the cooperation of these individuals that this project has been completed.

Gratefully acknowledged is Mr. Art Weiner, Administrator of Research and Development at MPTI, for his leadership and assistance in conducting this study.

Appreciation is given to Mr. Joe Myrick, Administrator of Research and Development, and to members of his staff at the Lakeshore Technical Institute for their guidance and assistance in this study.

Special thanks to the staff at MPTI, to Joan Gerlach, to members of the Business Office, and to members of the Word Processing Center for assistance in the production of this report.

A sincere thanks to Roland Krogstad Vocational Education Consultant, Research, Wisconsin Board of VTAE, for his support and assistance.

Gratitude is also expressed to all others who cooperated in the completion of this project, and to those who responded to the various questionnaires included in this project.

Special recognition is also given to Dr. Russell Paulsen and to Mr. Marvin Berg and their fellow staff members at the North Central Technical Institute for their assistance in collecting information for this study.

Art Marson

SUMMARY

A Cost Benefit Analysis Study has been conducted, using a consortium approach between the Moraine Park Technical Institute (MPTI), the Lakeshore Technical Institute (LTI), and the North Central Technical Institute (NCTI). The time span for the study was from July, 1976 through June, 1977.

The major purpose of this study was to refine a Cost Benefit Model which was developed by MPTI and LTI to evaluate the benefits and the costs of full-time vocational-technical programs. Along with refining a model for full-time programs, a Cost Benefit Model was developed for aidable, noncredit adult education courses.

The two Cost Benefit Models were developed, refined, and tested on a sample of nine full-time vocational-technical programs and on sixty-three adult education courses. The programs and courses chosen reflect a cross section of most of the instructional areas found in vocational-technical education.

The results of this study show that the benefits of a vocational-technical education outweigh the costs. Four measurements of the relationship between costs and benefits were calculated. The Average Payback Period, as calculated in the study, shows that it takes society 4.28 years to recoup the cost of the education and that it requires an individual student 2.71 years to recoup his/her investment in their education. Other calculations show the Rate of Return on an investment in vocational-technical education--46% for society and 62% for the individual; the Present Value of the Benefits--$11,626 for society and $11,927 for the individual; and finally, the Cost Benefit Ratio, which is 2.70 to 1.00 for society and 2.17 to 1.00 for an individual student.

As a result of the nine test programs and the sixty-three test courses, it can be concluded that vocational-technical education at either of the three participating schools is a profitable investment for both society and for the individual student. It can also be concluded that usable Cost Benefit Models have been developed to analyze vocational-technical programs and courses. Continued use and refinement of these models is encouraged.

COST BENEFIT MODEL

INTRODUCTION

Education is a commodity that is not very well defined. One of the better ways to define it is to state that it is both a process and a product, the process being that of acquiring knowledge, the product being the knowledge that has been acquired and the effect this knowledge has on the society around us. Parallel to this concept of education being a process which puts out a product, is the concept of costs and benefits - costs relating to the educational process and the benefits relating to the educational product. However, unlike all other manufacturing processes which create a product, education does not fit nicely into established accounting principles. Therefore, it has become necessary to modify the established accounting principles in order that they can evaluate education from a cost and benefit aspect.

It has become necessary in today's society to account to local taxpayers for the spending of already short educational tax dollars. Cost Benefit Analysis is a prime factor in any accountability procedure. Educators for centuries have researched methods of improving the educational process, and the present step in this research process is to look at the educational product - the student - in relation to the cost of the educational process. Educators should be encouraged by the challenge of proving that their product is a valuable one. They should be confident that these research efforts will improve both the process and the products to which they have been devoted for many years.

This report contains a refinement of procedures that have been established through previous research efforts. The following pages outline procedures that can be followed to arrive at costs and at benefits of VTAE programs and courses. These procedures have also been tested on a sample of full-time programs and adult education courses, and the results of these test programs and courses are given

BACKGROUND

A search of literature published during the 1960's and 1970's shows that there has been much written about the costs and benefits of educational programs. Taxpayers are questioning the productivity of increased educational costs, and an attempt to answer this challenge is being made through Cost Benefit Analysis Studies. Many of these studies compare costs and benefits of academic high school programs with vocational high school programs; on the other hand, some studies strive to establish the costs and the benefits of post-high school vocational education. The following are summaries of various well-known Cost Benefit Analysis Studies.

Corazzini, in a 1963-64 study of secondary education in Worchester, Massachusetts, compares the costs of a regular high school education to the cost of both boys' and girls' vocational education. He concluded that the cost per pupil for regular high school (grades 10-12) students was $452, for male vocational students (grades 9-12) was $964, and the cost per pupil was $793 for female vocational students (grades 9-12). The major factor for the cost difference was teachers' salaries. Other factors include the cost of utilities, maintenance, cafeteria, athletics, facilities and equipment, and various private costs such as books, supplies, and foregone earnings.

In 1964-65, Taussig conducted a study of vocational education in New York City. He derived his cost information by first taking the total current costs for both vocational and academic schools and putting them on a per pupil basis. Next, he adjusted these average current costs per pupil by a rough estimate of per pupil capital costs to obtain the total per pupil costs. Finally, these costs were expanded by the number of students in vocational programs. Taussig concludes that the cost differential between academic and vocational schools is $509 per pupil, and that it took approximately $2,200 to produce each vocational graduate in 1965. He does not supply any data on vocational costs per program; and although he describes marginal cost analysis, no real attempt is made to estimate marginal cost. Also, he assumed capital costs to be 22% of current costs, and this assumption is, at best, arbitrary.

Carroll and Ihnen conducted a study (1966) of Gaston Technical School graduates (Gastonia, N. Carolina). In their study, 45 white male Gaston Tech graduates were compared with 45 white male high school graduates having similar backgrounds and characteristics. Costs and benefits for both groups were collected for seven years. At the end of seven years, it was found that the cost to society for two years of education was $7,425 per student ($5,197 for loss of productivity while in school, plus $2,228 for providing school facilities, supplies, and personnel), and the average private cost per student was $4,920. Rate of return comparison was made between the two groups. The estimated rate of return to society for a Gaston Technical School graduate was 16.5% and to the individual graduate, it was 22%. These high rates of return showed that a vocational-technical education at Gaston Technical School was a worthwhile investment.

Bowlby and Schriver conducted (1969) a study of 19 Tennessee area vocational-technical schools to investigate the effects of vocational training on labor force participation and unemployment. The study included 1,701 vocational-technical graduates individually matched with a control group. Information was collected from both groups by means of a questionnaire, and the final report concluded that vocationally trained workers have higher mean labor force participation rates, lower mean unemployment rates, and higher mean occupational mobility rates. Thus, higher employability and job mobility seem to be two benefits of a vocational-technical education.

In 1972, Kaufman, Cohn, and Hu conducted a study of Michigan secondary schools to provide the Michigan State Advisory Council for Vocational Education with information and a methodology for analyzing the added costs of vocational education in Michigan. Added costs were estimated in terms of both average cost and marginal cost differences between vocational and nonvocational programs in secondary education.

Questionnaires were sent to 236 secondary schools with 108 responding. The findings include:

> AVERAGE COSTS: On the average, vocational programs are more expensive than nonvocational programs by $95 per student hour. However, there is a wide variation in average added costs among the vocational programs. In Trade and Industry, Auto Mechanics, and Agricultural Mechanics, the added costs were much higher than $100.
>
> MARGINAL COSTS: In most cases, the added marginal costs were positive. Among them, the added marginal cost of Auto Mechanics, Auto Body, Agricultural Mechanics, General Office, Stenographic-Secretarial, Air Conditioning, Appliance Repair, and Drafting was well over $400. On the average, the added marginal costs of vocational programs are $115 higher than nonvocational programs.

Grazalah conducted two separate studies on the role of vocational education in Ohio based on a Cost Benefit Analysis approach. In his 1972 study, he included 14 vocational programs in 18 Ohio secondary schools that offer vocational education at the 11th and 12th grade levels. A comparison is made between a high school student entering a vocational program after 10th grade as opposed to continuing in an academic program or dropping out of school. The median rate of return on investment in all three options was determined, and Grazalah concluded that for all programs except Child Care, the rate of return is positive. Also, in all programs except for General Merchandise, the median rate of return is higher for males than for females. Finally, in all cases, median private rates of return are greater than median social rates of return.

In 1975, Grazalah viewed vocational education as an investment in human capital and, therefore, evaluated vocational programs in order to estimate the excess of social benefits over social costs that accrue from training an individual in any of the programs offered. Comparisons were made between the Net Social Present Value of a vocational program versus the Net Social Present Value of an academic program.

In conclusion, Grazalah states that increasing the participation rate by senior high school students in vocational programs to 40% of the average daily school attendance in all 103 vocational planning districts in the state of Ohio would result in a statewide increase in Net Social Benefits amounting to a minimum of $108,918,523 and a maximum of $326,951,424.

The Actual Net Social Benefits depend on whether the alternative to vocational education is an academic education or to drop out of school; whether more males or females enroll in the programs; any changes in the composition of the programs; or in the size of the 103 districts.

BACKGROUND IN WISCONSIN

Cost Benefit Analysis is in its infancy in the state of Wisconsin. Some attempts have been made to develop and test a model for establishing the costs and benefits of vocational education. These studies serve as a background for the present Cost Benefit Model.

In 1969, a research study by Leroy J. Peterson provided a primitive model to follow in conducting Cost Benefit Studies in vocational education. In this study, Peterson explains how to determine land, building, and other capital costs; the operational cost of the school; the cost per program for FTE (Full-time Equivalent) students; and foregone earnings or lost income due to attending a vocational school.

The findings of this study show that the cost per FTE at the Kenosha Technical Institute for the Accounting Program as $2,082.92, for the Fluid Power Technology Program it was $2,704.78, for General Business it was $918.19, for Practical Nursing the cost was $1,251.47, for the Secretarial Science Program it was $2,480.57, and for Welding the cost was $1,372.67.

Also, the cash payback period for four of the six above-mentioned programs was determined with the results being given in the following table:

TABLE 1

Cash Payback Period - Kenosha Technical Institute

Program	Foregone Earnings to the Individual	Public Costs
Accounting	3.6 years	5.2 years
Fluid Power Technology	7.6 years	14.2 years
Practical Nursing	5.2 years	9.7 years
Secretarial Science	27.0 years	47.7 years

During 1973-74, nine separate Cost Benefit Studies were conducted in nine vocational, technical and adult education (VTAE) districts in Wisconsin. These studies were conducted using a consortium approach with the Research Coordinating Unit of the Wisconsin Board of Vocational, Technical and Adult Education (WBVTAE). The purpose of the studies was to "improve decision making processes through the development and field testing of a Cost Benefit Model relevant to post-secondary vocational-technical education programs."[1]

---

1. Benefits from Selected Vocational Education Programs, Findings from Nine Cost Benefit Studies in Wisconsin, by Research Coordinating Unit, Wisconsin Board of Vocational, Technical and Adult Education, Madison, WI, 1975, p. 2.

In a Descriptive Cost Benefit Study conducted by W. Temte at Western Wisconsin Technical Institute in La Crosse, three Associate Degree Electronic Technology Programs (Industrial Electronic Technician, Bio-Medical Electronics, and Power Electrical) were evaluated. Using the hypothesis that the public economic benefit is greater than the public economic cost, a computerized method of allocating costs was tested. The results showed that for every dollar spent by society on vocational education, $1.40 would be returned to society in ten years.

Robert Webb in a Cost Benefit Study conducted at the District One Technical Institute, Eau Claire, evaluated the Agri-Business, Machinery Partsperson-Salesperson Associate Degree Program. The study used a five-year time span with social and private discount rates for 5%, to develop cost benefit ratios for the graduating classes of 1971, 1972, and 1973.

The results showed that within the five-year time span, the cost benefit ratio of the 1973 graduates was positive and greater than one, showing that their increased benefits had already exceeded the cost of their training. For the 1972 and 1971 graduates, the cost benefit ratio is positive, but less than one, and indicated that additional time was required before the cost of their education could be recouped.

In an earlier Cost Benefit Study conducted at the Moraine Park Technical Institute, the Food Manufacturing Technology Program was evaluated by an ex post facto design. Six variables (instructor, building, equipment, student, administration, and auxiliary services) were included as cost inputs and compared to four benefit inputs (increased earnings, unemployment, increased tax revenue, and increased productivity to society). The private costs for the two-year program were $13,420.28 and would be recouped in five years. An additional individual cost of $2,188.28 due to the two-year program would be regained during the sixth year. Society's economic cost for the two-year program per FTE was $2,847.12. This amount would be paid back to society through increased taxes in 6.2 years after graduation.

At the Waukesha County Technical Institute, W. Winter conducted a Cost Benefit Study of the Practical Nursing Program. Three major factors in determining per student costs include: student enrollment, length of program, and cost for the supporting services. The per student cost was determined to be $2,039. On the benefit side of the evaluation, the increased earnings of a Practical Nursing graduate show that they have an additional $2,268 per year to spend in the community.

Private Economic Benefits Versus Private Economic Costs of Associate Degree Nursing Students, conducted by F. Mueller at the Milwaukee Area Technical College, compares private economic cost and benefits of the two-year Registered Nurse Program. Questionnaires were sent out to June, 1973 graduates, with 50 of them being returned. These returns were compared to a simulated group of 1973 high school graduates.

According to the findings, 70% of the respondents were employed full time, 30% part time. Ninety percent felt that the economic benefits of their education exceeded the economic costs, and 94% were satisfied with their present job. The cash payback period was determined to be 2.87 years for MATC nursing graduates. The internal rate of return, using a five-year time span, was 23.9%.

Dominic J. Bordini completed a follow-up study on 18 graduates of the Machine Shop Associate Degree Program at Fox Valley Technical Institute in Appleton. Information was collected by having an educational coordinator personally contact each graduate's employer with a survey instrument. The findings show that the graduates have an annual gain in salary of $1,580 and that the operational cost of the school per FTE of $3,546.79 would be returned to society in three years, assuming a 15% combined state and federal tax rate on gross income.

Also, it can be concluded that vocational-technical education at Fox Valley Technical Institute is a worthwhile investment for a student, as each graduate reported they enjoyed their job, they were earning higher wages, and they had become a better community member.

The Welding Program at the Northeast Wisconsin Technical Institute at Green Bay was evaluated by B. Koopika. The basic viewpoint of the study was that of the student. It was found through a comparison of high school grade point averages to NWTI grade point averages (considerably higher), that students were more highly motivated at NWTI. Monthly salaries of the Welding graduates ranged from $546 to $684, which is equal or better than the average wage reported by the employment service. The percent of employment ranged from 88% in 1972 to 100% in 1974. Finally, the annual student cost per year was given at $1,852.

In a Cost Benefit Study of Library Media Technical Assistant Program, John Mazurek mailed questionnaires to 36 graduates from 1971, 1972, and 1973. Twenty-eight, or 78%, were returned.

Four methods of comparing costs to benefits were used. The present value of net benefits for 1971 graduates equaled $3,428; for 1972 graduates, it was $196; and for 1973 graduates, it was $420.

The rate of return for a four-year period was 5.9% for 1971 graduates, 4.5% for 1972 graduates; and 3.7% for 1973 graduates.

A benefit-cost ratio was set up for the same four years. 1971 graduates had a ratio of 1.20 to 1.00; 1972 graduates had a ratio of 1.01 to 1.00; and 1973 graduates had a ratio of 1.02 to 1.00

The payback period for all three groups was relatively short. For graduates of 1971 and 1972, the costs would be paid back in 2.1 years; and for 1973 graduates, the costs would be paid back in 1.7 years.

In the last of the nine studies during 1973-74, Susan Sewell used questionnaires with 30 graduates and 31 nonattenders of the Business Administration-Accounting Program at Southwest Technical Institute.

The unique feature of this study was its attempt to compare attitudes between graduates and those students who signed up for the program but did not attend. It was found that graduates had a better attitude toward education, and that they had a more positive attitude toward their job than did the nonattenders.

Other findings show that the graduates are earning $585.27 more than the nonattenders, and that the payback period for the costs of education range from 5.60 years to 6.97, depending on what basis foregone earnings are determined.

Southwest Technical Institute continued its Cost Benefit Analysis efforts in a report published in August of 1974. In this report, 64 Cost Benefit Studies in various vocational - technical areas were reviewed and summarized. Both private and social costs and private and social benefits were identified. Factors influencing Cost Benefit Studies, methods of obtaining information, and common problems experienced by the authors of the 64 studies also were listed. The findings of this report are an excellent aid to anyone trying to establish the costs and benefits of vocational-technical programs.

Recently (November, 1975), Mehar Arora of the University of Wisconsin-Stout developed a manual to identify and measure the societal costs and benefits of vocational education programs. The procedures for establishing costs include the cost of instruction, the cost of administration, and auxiliary services cost. In a similar fashion, procedures for measuring societal benefits are explained through the use of samples. Finally, five methods of comparing societal costs to societal benefits are illustrated. These are: 1) net present value of societal benefits; 2) net annual value of benefits; 3) rate of return; 4) cost-benefit ratio; and 5) payback period.

The actual testing of the procedures explained in the manual was not conducted due to time limitations.

Dr. Arora continued his research on costs and benefits in a report published during January, 1977. This report contains all of the forms required to facilitate the collection of information for conducting Cost Benefit Studies. The forms and the instructions for using them enable a researcher to establish the societal cost-benefit ratios of vocational and manpower programs.

Previous to this present study, the MPTI Research Department conducted a Cost Benefit Study during the 1975-76 school year. This study outlined a model, similar to that of Dr. Arora, for conducting a cost benefit study in the Wisconsin VTAE System and tested the model on a sample of nine full-time programs at the Lakeshore and Moraine Park Technical Institutes. The results of these test programs show that vocational-technical education at Lakeshore and Moraine Park is a profitable endeavor for both the student and society. Over a ten-year time span, VTAE graduates obtain benefits with a present value of $13,758.88 and society obtains benefits with a present value of $24,078.00. For the same ten-year time span, the ratio of benefits to costs is 2.05/1.00 for students and 5.63/1.00 for society. Finally, the length of time required for earning back what it cost for a VTAE education (the payback period) is 4.11 years for a student and 2.84 years for society in general.

PURPOSE

This Cost Benefit Study has been conducted using a consortium approach with the Moraine Park, Lakeshore, and North Central VTAE Districts. Its purpose was to continue to refine the Cost Benefit Model developed by the Moraine Park and Lakeshore Technical Institutes during the 1975-76 school year. A second purpose of this project was to develop a Cost Benefit Model for adult education courses. Both of these models were to include procedures for cost allocation and formulas to measure economic and noneconomic benefits for individual students and for society.

Once the models for conducting the Cost Benefit Study had been developed, they were to be tested on a sample of full-time programs and adult education courses. Programs selected for testing the procedures and formulas include Auto Body Repair, Engine Technology, and Data Processing at MPTI; Fashion Merchandising, Auto Body Repair, Graphic Arts, and Mechanical Design at LTI; and Clerk-Typist and Electronics at NCTI. In addition to these full-time programs, 63 aidable, noncredit adult education courses were selected, and the method for determining their costs and benefits was also tested.

METHOD

Data Gathering Techniques

Cost Benefit Analysis is a retrospective process. It depends on existing data or records for information. In this respect, therefore, any Cost Benefit Analysis is limited by the type of information that is available. The more accurate data that are put into Cost Benefit Formulas, the better the results will be.

In determining the cost aspect of a Cost Benefit Study, the starting point should be the total expenditures of the educational institution being evaluated. Once a total cost figure is derived, it should be distributed or allocated to each individual cost center in the institution. Two main cost centers are the direct costs and the indirect costs. These two broad divisions are usually further divided into other cost centers to which costs can be allocated. These cost centers and the costs allocated to them are determined by the accounting records used by the educational institution. Therefore, the most important data gathering technique is a record analysis of all accounting records available in the educational institution that is being evaluated.

Another important method of obtaining information is the mailed questionnaire. This method was used extensively in the present Cost Benefit Project, as questionnaires were sent to VTAE graduates, to high school graduates, and to employers. In lieu of the mailed questionnaire, other techniques such as personal interviews or survey techniques may be used.

Setting up a comparison between two groups - a control group and an experimental group - is another way of gathering information for Cost Benefit Analysis. This can be accomplished by identifying two groups prior to an educational program, let one group participate in the program while the other group does not participate, and make a comparison between the two groups after the program has been completed. This procedure can also be done ex post facto, by making a comparison between two groups after one group had taken an educational program while the second group had not taken the program. The second procedure is slightly less accurate, as no control is exerted over either group until after the educational program has been completed.

Many other methods of gathering data are available. Public institutions are able to supply information and statistics on various groups of people. These institutions include such places as Job Service, Department of Social Services, etc. This can save researchers valuable time in duplicating information that is already available to them.

Cost Benefit Analysis Techniques

There are four basic techniques for comparing benefits to costs. These four techniques can be explained as follows:

1. Present Value of Benefits Method: The present value of benefits is established by using a discount rate for all costs and benefits in order to reduce them to their present value. Once the present

value has been established, costs are subtracted from benefits with the remainder being equal to the present value of the benefits of an educational program.

2. Cost Benefit Ratio Method: The Cost Benefit Ratio is calculated by dividing the present value of the benefits by the present value of the costs. In all cases this ratio has to be larger than one (1) for the educational program to be beneficial.

3. Rate of Return Method: This method establishes the rate of interest that will make the present value of the benefits equal to the present value of the costs. It is calculated by determining what percent the costs have to be multiplied by in order to equal the benefits.

4. Payback Period Method: The payback period method is simply the length of time required to recoup the costs of an educational program. An individual will recoup the cost of the program through increased earnings, while society will recoup the cost of the program through various means - the most important being increased tax revenue.

Elements of Cost Benefit Analysis

Many different elements have been described and measured in the various Cost Benefit Studies. A majority of these elements were included in the present study. These elements are listed in Table 2 on page 12. They are broken down into eight separate categories: 1) private economic costs; 2) private economic benefits; 3) private noneconomic costs; 4) private noneconomic benefits; 5) social economic costs; 6) social economic benefits; 7) social noneconomic costs; and 8) social noneconomic benefits.

Cost Benefit Model Development - Full-time Programs

The techniques and methods for conducting Cost Benefit Analysis are presented in this section of the report. These techniques form a Cost Benefit Model for evaluating vocational-technical education in the state of Wisconsin. Many of these methods were tested in the present Cost Benefit Project, with the results being presented in the next section of this report. First, let us look at the detailed method for conducting a Cost Benefit Analysis.

The costs of a vocational-technical education are assumed by two entities - the individual student and the taxpayer or society. Therefore, any Cost Benefit Model must be able to evaluate costs and benefits from both the viewpoint of the student and from the viewpoint of society. This model will examine both viewpoints.

A general overview of the Cost Benefit Model is presented in Table 3. This table breaks all costs and benefits into their economic and noneconomic components and lists some methods of obtaining the information desired. The table is given in outline form to highlight the various areas of costs and benefits.

The first area listed in Table 3 is school cost, which is the major cost in the entire Cost Benefit Analysis. The reason for its importance is that school costs run into millions of dollars each year, which is far more than any other area of costs or benefits.

TABLE 2
COST - BENEFITS - VOCATIONAL SCHOOL GRADUATE

PRIVATE (Student)				SOCIAL (School)			
Economic		Noneconomic		Economic		Noneconomic	
Cost	Benefit	Cost	Benefit	Cost	Benefit	Cost	Benefit
Tuition Fees Books Supplies Travel Lodging Foregone Earnings Interest on Loans	Public assistance while in school. Social Security VA Benefits Scholarships Unemployment Compensation (while in school) Earnings while in school Post education income gain	Less leisure time. Missing of family and friends while in school. Inconvenience of mobility and relocation anxieties	Greater job satisfaction Greater employability Increased social involvment Community involvment Social activities while in school Vertical mobility Home ownership Option of entering other educational programs.	Social Security VA benefits. Public assistance payments Unemployment payments Capital investment in school a. building b. land c. remodeling d. equipment Operational costs: a. instructor salaries b. auxiliary personnel salaries c. general supplies d. administration salaries e. custodial salaries f. maintenance g. utilities	Lower unemployment. Taxes on school earnings Additional tax revenue Additional productivity of goods Interest on Loans	Foregone productivity of a student. Displacement of a worker by a VTAE graduate	Better citizen More communi involvement Lower unemployment Social organization: Percent of VTAE graduates remaining in area of training and contributing to its economy. Better attitudes: a. self-acceptance b. education c. employment

TABLE 3

COST BENEFIT MODEL

- I. Information Required (Economic)
  - A. School Cost
    - 1. End-of-Year Printout - Cost Centers
      - a. Supervisory and administrative salaries
      - b. Instructor salaries
      - c. Clerical and custodial salaries
      - d. Supplies
      - e. Building, land and equipment
      - f. Utilities
    - 2. Cost Allocation Schedules
    - 3. Campus/Wisconsin MIS
    - 4. Cost Benefit Surveys
      - a. Equipment survey
      - b. Instructional Resources survey
  - B. Student Costs
    - 1. Tuition, Fees, Books, Supplies, Travel, Lodging, etc.
      - a. Registrar's Office (Student Records)
      - b. Follow-up questionnaire to VTAE graduates
  - C. Wages
    - 1. Earnings of a VTAE student, either work study or outside job
      - a. Registrar's Office
      - b. Follow-up questionnaire to VTAE graduates
    - 2. Wages of a high school graduate with no additional education
      - a. Special questionnaire to high school graduates
      - b. Job Service Office
      - c. Minimum wage rate
    - 3. Vocational-Technical school graduate's wages
      - a. Follow-up survey (conducted yearly)
      - b. Special follow-up questionnaire to VTAE graduates
  - D. Welfare, Financial Aids, Unemployment, etc.
    - 1. Public Assistance Payments, Unemployment Compensation
      - a. Registrar's Office (Student Records)
      - b. Department of Social Services
      - c. Job Service
      - d. Follow-up questionnaire to VTAE graduates
    - 2. VA Benefits, Scholarships
      - a. Registrar's Office (Student Records)
      - b. Follow-up questionnaire to VTAE graduates
  - E. Taxes
    - 1. High School Graduate
    - 2. Vocational School Graduate
- II. Information Required (Noneconomic)
  - A. Effect of a Vocational-Technical school graduate upon the job market
    - 1. Displacement, vacuum, or multiplier effect
      - a. Employer visits
      - b. Survey form
    - 2. No effect

B. Acceptable Estimates for:

1. Job satisfaction
    a. Follow-up questionnaire to high school and VTAE graduates
    b. Employer visits
2. Amount of leisure time
    a. Amount while in school versus amount after graduation
        1) Follow-up questionnaire to high school and VTAE graduates
3. Degree to which graduates remain in the area of their training
    a. Mobility
    b. Employability
        1) Follow-up questionnaire (conducted yearly)
        2) Special follow-up questionnaire to VTAE graduates
4. Community Involvement
    a. Voting
    b. Clubs and social organizations
    c. Crime rate
        1) Follow-up questionnaire to high school and VTAE graduates
5. Family involvement
    a. Amount of time away from family
    b. Being a better parent
6. Motivation and Attitudes
    a. Self-acceptance
    b. Attitude toward education
    c. Employment

III. Formulas for Comparing Benefits to Costs

A. Rate of Return - what percentage rate the costs have to be multiplied by to equal the benefits.

B. Present Value of Benefits - a discount rate is used to reduce all costs and all benefits to their present value. Once the present value is established, costs are subtracted from benefits with the remainder being equal to the present value of the benefits.

C. Payback Period - the length of time required to recoup the costs of an educational program.

D. Cost Benefit Ratio - The present value of the benefits are divided by the present value of the costs.

School costs consist of both the operating cost of the educational institutions, and the cost of the facility and the equipment included in it.

Operating costs include all costs for the school listed under the General and the Restricted Revenue Funds. These costs are listed by Cost Center and include such areas as Instruction, Instructional Resources, Student Services, Research, General Administration, General Institutional Expense, and Physical Plant. These major cost centers are further divided by departments. An example of the Cost Centers for the Moraine Park Technical Institute is presented in Table 4.

The first step in determining the operating cost of a program is to select the Cost Centers that relate to the particular program. For illustrative purposes, let us examine the operating cost of the Engine Technology Associate Degree Program at Moraine Park Technical Institute, using the Cost Centers listed in Table 4.

In Table 4, the first major cost is Instruction, and the Cost Centers under Instruction that relate to Engine Technology include: A) Main Office; B) Word Processing Center; 3) Instructional Services; 6) Trade and Technical; 8) General Education; and 9) Academic Administration. Each of the other six major costs and the Cost Centers located under them relate to the Engine Technology Program as well as to all other programs offered by the school. Therefore, in order to determine the operating costs of the Engine Technology, it is necessary to add the costs relating to Engine Technology from the Main Office, the Word Processing Center, the Trade and Technical Department, Instructional Services, General Education, Academic Administration, Instructional Resources, Student Services, Research, General Administration, General Institutional Expense, and Physical Plant. This has been done, and the results are presented in Table 5.

As can be seen, after each Cost Center is identified, it becomes necessary to allocate the portion of that Cost Center to the program being evaluated. Continuing our example, the first cost identified under Engine Technology is the "Main Office". This Cost Center is used by all programs, and it is assumed this usage is based on the number of students or the number of FTEs enrolled in the program, compared to the total number of students or the total number of FTEs in the school. From Table 6, we can see that there were 28.90 FTEs in the Engine Technology Program, compared to 2,687.78 FTEs in the entire school. Therefore, by simple division, we can determine that approximately 1.1% of the FTE students were enrolled in the Engine Technology Program, and assuming that all students use the Main Office equally, we can determine that 1.1% of the cost of operating the Main Office should be allocated to Engine Technology.

The next Cost Center relating to the Engine Technology Program is the Word Processing Center. This Cost Center is allocated to the various programs according to a special survey of usage.[2] From the special survey, we can determine that the portion of the Word Processing Center allocatable to Engine Technology is .8%.

---

[2] Among the special surveys of usage are one for the Word Processing Center, one for the Media Center, one for the Duplicating Center, and one for the Library. All are found in the Appendix.

TABLE 4

MORAINE PARK DISTRICT FINANCIAL DEPARTMENT CODING (COST CENTERS)

MAJOR COST	COST CENTER
1	Instruction
	A. Main Office - FDL
	B. Word Processing Center
	D. Parent-Child Center
	E. Home Economics
	F. Safety
	X. Cosmetology
	Y. Food Service
	1. Agri-Biotechnology
	2. Business Data Processing
	3. Instructional Services
	4. Apprenticeships
	5. Health Occupations
	6. Trade and Technical Engine Technology
	7. Part-Time Programs
	8. General Education
	9. Academic Administration

MAJOR COST	COST CENTER
2	Instructional Resources
	1. Data Processing
	2. Library
	3. Media Center
	4. Duplicating Center
3	Student Services
	1. Administration
4	Research
	1. General
5	General Administration
	1. Board Expenses
	2. Director's Office
	3. Business Office
	4.
	5. Public Information
	6. Personnel Office
6	General Institutional
	1. General
7	Physical Plant
	1. General

TABLE 5

ENGINE TECHNOLOGY

OPERATIONAL COST

TYPE OF COST	AMOUNT	MEANS OF ALLOCATION
1. Main Office	877.72	FTE
2. Word Processing Center	585.84	Percent of Usage
3. Instructor Salary & Fringe	32,415.77	Actual Cost
4. Other Salaries, Supplies, Etc.	12,867.45	FTE
5. Instructional Services	818.40	FTE
6. General Education - Instructors Included in No. 3 Above	2,819.05	FTE
7. Academic Administration	5,771.09	FTE
8. Fringe Benefits	844.97	Percent of Usage
9. Data Processing	877.36	FTE
10. Library	4,003.06	Percent of Usage
11. Media Center	3,109.83	Percent of Usage
12. Duplicating Center	1,366.29	Percent of Usage
13. Student Services	2,288.12	FTE
14. Research	530.60	FTE
15. General Administration	3,407.76	FTE
16. General Institutional	2,078.59	FTE
17. Physical Plant	7,374.98	Percent of Usage
TOTAL	$82,036.88	

1975/76 Cost:

Per Graudate = $10,254.61 (8)

Per FTE = $ 2,838.65 (28.90)

Continuing, the next Cost Center is Instructional Services. The portion of this Cost Center allocatable to Engine Technology is determined by the same FTE criterion as was used for the Word Processing Center above. Therefore, 1.1% of the cost of Instructional Services is allocatable to Accounting.

Next is the Trade and Technical Cost Center, which is further broken down into a special Cost Center for Engine Technology. The costs in this Center include instructor salaries, fringe benefits, supporting salaries, supplies, etc., and these costs are known.

The next Cost Centers are General Education and Academic Administration, and their costs are all allocated to Engine Technology by the same FTE criterion used above.

The second major cost is Instructional Resources, and this cost is broken down into Cost Centers for Data Processing, Library, Media Center, and Duplicating Center. The allocation of costs from these four areas is determined by special surveys of use, except for Data Processing, which is determined by an FTE formula. From the special surveys of usage, we see that 1.08% of the Data Processing cost is allocated to Engine Technology along with 4.69% of the Library cost, 2.16% of the Media Center cost, and 2.73% of the Duplicating Center cost.

The remaining four major costs relate to various overhead and administrative costs and can be divided among all the programs on an FTE basis. Thus, Engine Technology would be liable for 1.1% of the cost of these four areas as previously determined.

TABLE 6

1975-76 PROGRAM FTE TOTALS

PROGRAM	FTEs
Engine Technology	28.90
Data Processing	32.69
Auto Body - MPTI	56.63
Auto Body - LTI	30.91
Fashion Merchandising	40.87
Graphic Arts	46.38
Mechanical Design	56.33
Electronics[3]	38.00
Clerk-Typist[3]	35.00

---

[3] Headcount totals were used instead of FTE totals.

A notable exception to the previous cost allocation procedures is the seventh major cost, Physical Plant. This major cost can be broken down in several ways, including by FTE as suggested in Table 6. However, the best method for accurately distributing this Cost Center would be through actual space usage. Assume that 50% of the total educational facility is instructional space and that 50% of the building is auxiliary service space (office space, halls, heating plant, etc.) Also, assume that the Engine Technology Program uses 3% of the instructional space in the building. Then, the total cost of the Physical Plant could be broken down so that 3% of the instructional space cost plus 1.1% of the auxiliary space cost (determined by the FTE formula where Engine Technology has 1.1% of the total FTEs in the school) would equal 4.1% of the Physical Plant Cost Center allocatable to the Accounting Program.

This leads right into the next step in the Cost Benefit Model. As you will recall, the School Costs are broken down into two sections - the Operating Cost of the educational institution (which we have just examined), and the Facility and Equipment Cost of the educational institution. The Facility and Equipment Cost of the institution is calculated in the same manner as the cost of the Physical Plant Cost Center was determined.

Assume that the lifetime of the facility is 50 years, and the lifetime of the equipment is 10 years. (These assumptions are fairly common in Cost Benefit Analysis Studies.) Then the total cost of the facility divided by 50 years (using straight line depreciation) would give the yearly cost of the facility, and the total cost of the equipment divided by 10 years would give the yearly cost of equipment. Once these yearly costs are determined, they can be allocated as mentioned above.

The amount relating to instruction has to be separated from the amount relating to auxiliary services. Then, the Instructional Space Cost can be allocated to Accounting according to the amount of space used for the program, and the Auxiliary Space Cost can be allocated according to FTEs. If the actual usage of equipment is known, this can be the basis for allocating Equipment Costs to each program.

The illustration on the following page may help to clarify the allocation of Building Costs.

ILLUSTRATION 1[4]

ALLOCATION OF BUILDING COSTS

A = Total Building Cost = \$5,000,000

B = Cost Per Year (50 years) = \$100,000

C = Total Space = 50,000 square feet

Cost per square foot = $\frac{B}{C}$ = \$2.00 (D)

Auxiliary Space = 20,000 sq. ft. (F)
Auxiliary Space Cost = D x F = \$40,000 (G)
Number of FTEs in School = 2,000
Number of FTEs in Engine Technology = 50
Percent of FTEs in Engine Technology = 2.5 (H)

Engine Technology Auxiliary Space Cost = G x H = \$1,000

Instructional Space = 30,000 sq. ft.
Engine Technology = 1,000 sq. ft. (E)
Other = 29,000 sq. ft.

Engine Technology Instructional Space

Cost = D x E = \$2,000

Total Engine Technology Space Cost = \$2,000 + \$1,000 = \$3,000

This concludes the discussion of School Costs. In general, school costs are determined by taking the total cost of the school and breaking this cost down by various Cost Centers, which in turn are allocated to the program or programs to be evaluated. One method of allocating costs was described above; however, many other methods are available for cost allocation. Two methods which might improve the accuracy of allocating school costs would be the Campus Wisconsin Management Information System[5] and the Western Interstate Commission for Higher Education (WICHE) System[6]. Both management information systems provide for establishing Cost Centers which can further be allocated on a program basis.

---

[4] All figures used in this illustration are arbitrary selections and have no bearing on the cost of the Engine Technology Program.

[5] SDL Systems Research Groups, Campus/Wisconsin, Toronto, Canada, August, 1973.

[6] Dahnke, Harold T.; Dennis P. Jones; Thomas R. Mason; Leonard C. Ramney, Higher Education Facilities Planning and Management Manuals, Western Interstate Commission for Higher Education, Boulder, CO, November, 1970.

The second area listed on Table 3 is Student Costs. These costs include tuition, fees, books, supplies, travel and lodging. Various other minor expenses may also be included. Two areas of obtaining Student Costs are also given: you can either obtain the information from the registrar's office, or you can obtain the information by a survey form. Such a survey form is presented in Illustration 2. Questions No. 9, 11, 12, and 13 on this survey form provide the information required to determine Student Costs.

The third area listed on Table 3 is Wages. Wages are another important factor in any Cost Benefit Analysis. They serve as the major way to determine the economic benefits of a VTAE graduate over a high school graduate with no post-high school education. They also serve to determine the foregone earnings of a VTAE graduate, the foregone earnings being equal to the amount of wages earned by the high school graduate during the time a VTAE student spends in school.

Three different wage determinations are necessary: 1) wages of a high school graduate with no post-high school education; 2) wages of a VTAE student while in school; and 3) the wages of a VTAE graduate.

The wage of a high school graduate with no additional post-high school education can be determined in three ways. The first way would be through a mailed survey form such as shown in Illustration 3. On this survey form, questions 4 through 11 relate to employment, and the actual wage of a high school graduate is given in questions 8 and 9. Other methods of determining the wage of a high school graduate would be to assume they are paid the minimum wage, which in Wisconsin is $2.20 per hour. Of course, this is not the best determination of a high school graduate's wage. Also, local Job Service offices have reports and statistics which could serve as a guideline in determining an average high school graduate's wage. Care should be taken in determining the wage of a high school graduate, no matter which method is to be used.

The wage of a VTAE student while in school (excluding any financial aids they may receive) can be determined in two ways. Either, the registrar's office will have this information available, or a survey form should be used. Question No. 8 in Illustration 2 provides this required information.

The final wage to be determined is that of a VTAE graduate. This wage has to be determined by program in order for it to fit into a Cost Benefit Analysis. The best method for determining the wage of a VTAE graduate is to use a survey form. Each year a follow-up study is required by the State Board of Vocational, Technical and Adult Education, and this follow-up study includes wages. In addition to the follow-up study, questions No. 19 and 20 from Illustration 2 can supply the required information on VTAE graduate wages.

The fourth area of economic information as listed in Table 3 is Financial Aids, Welfare, etc. This information is required for a number of reasons. They serve as income for students (to be deducted from foregone earnings in the Cost Benefit Analysis), and they serve as a cost or a benefit to society, depending on whether such payments increase or decrease according to the effect of a vocational-technical education.

Information in this area can be collected from the survey form shown in Illustration 2, questions 5, 6 and 7. Other means of collecting this information include records obtainable from the registrar's office or, in some instances, the Job Service Office, or the Department of Social Services.

ILLUSTRATION 2
COST BENEFIT FORM
VTAE GRADUATES

1. Check one: ________ male ________ female   2. Age: ________

3. In what year did you graduate from high school? __________

4. Type of high school program: _____vocational _____academic (college prep.)

SCHOOL COSTS

5. Did you receive any LOANS to defray the cost of your education?
_____ yes _____no Amount: $_____________

6. While in school, did you receive any SCHOLARSHIPS or GRANTS?
_____ yes _____no If yes, estimate the average annual income from these sources: $_____________

7. While in school, did you receive any:
Unemployment Compensation $______________
Social Security $______________
City, State or Federal Subsidy $______________
Veterans Benefits $______________

8. As a student, how much did you earn per year from part-time or full-time jobs? $__________________

9. How much did you spend per year on TUITION, BOOKS and SCHOOL FEES?
$____________________

10. How much did you earn, before taxes, during the year prior to entering MPTI or LTI? $_________________

11. Where did you reside while attending school?
__________ at home ______________ private room
__________ apartment ______________ other (specify)________________

12. Please list the cost of the above residence. $______ per week $________ per month

13. How many miles did you drive or walk to school? ______________ miles

ECONOMIC FACTORS AFTER GRADUATION

14. What is your present employment status?
________ employed full time ________ employed part time
________ military service ________ unemployed

If you are unemployed, please explain: _____ homemaker ____ school
_____ looking for a job
_____ other: ____________________

If you are in school, the name of the school is:____________________________
date of graduation:______________

- over -

15. Please complete the following:

a) Number of jobs held since high school? ____________
Number full time: ________ Number part time ____________

b) Number of promotions: __________

c) What is the average length of time you spent on a job, considering each promotion as a new job? _____________ months.

16. How long did it take to find a job in your field after graduating from MPTI or LTI? _______________ weeks.

17. Do you consider your present job to be a permanent occupation? _____ yes ___ n

18. How many hours do you work during an average week? ______ hours regular time
______ hours overtime

19. What was the starting annual salary you received in your first position after high school? $_________ After leaving MPTI or LTI? $___________

20. What is your current annual salary before taxes? $_____________

21. If you have an additional source of income besides the above listed job, please indicate your annual income from this source: $___________

22. What was the total amount of Federal and State Income Taxes that you paid on income earned in the following years (after deductions):

1973 $__________________________________ (taxes paid in 1974)
1974 $__________________________________ (taxes paid in 1975)
1975 $__________________________________ (taxes paid in 1976)
1976 $__________________________________ (taxes paid in 1977)
1977 $__________________________________ (taxes paid in 1978)

23. How satisfied are you with your present job?

______ very satisfied
______ fairly satisfied
______ average satisfaction
______ very little satisfaction
______ highly dissatisfied, but intend to stay on the job
______ highly dissatisfied, but intend to look for a new job

24. Were you out of work at any time (except for the time that you were in school) during 1976? ____ yes _____ no During 1977? _____ yes ____ no
If yes, how many weeks were you out of work? _____ weeks in 1976; ____ weeks in
mount of Unemployment Compensation received in 1976 $___________;
in 1977 $_________________

25. COMMENTS:

Thank you very much for taking time to complete this survey form.

ILLUSTRATION 3

COST BENEFIT FORM

HIGH SCHOOL GRADUATE

1. Check one: ______ male ______ female 2. Age: __________

3. In what year did you graduate from high school? __________

4. Type of high school program: ______ vocational ______ academic (college prep.)

5. What is your present employment status?
______ employed full time
______ military service
______ employed part time
______ unemployed
______ student
If you are unemployed, please explain: ______ homemaker ______ school
______ looking for a job
______ other: __________________
If you are in school, the name of the school is: ____________________________
date of graduation: __________

6. Please complete the following:
a) number of jobs held since high school:
Number full time ______ Number part time ______

b) Number of promotions: ______

c) What is the average length of time you spent on a job, considering each promotion as a new job? __________ months

7. Do you consider your present job to be a permanent occupation? ________

8. How many hours do you work during an average week? ______ hours regular
______ hours overtime

9. What was the starting annual salary you received in your first position after high school? $______________

10. What is your current annual salary before taxes? $______________

11. If you have an additional source of income besides the above listed job, please indicate your annual income from this source: $____________________
Source: ____________________

12. How long did it take to find a job after graduating from high school?
__________ weeks

13. What was the total amount of Federal and State Income Taxes that you paid on income earned in the following years (after deductions):
1973 $____________________ (taxes paid in 1974)
1974 $____________________ (taxes paid in 1975)
1975 $____________________ (taxes paid in 1976)
1976 $____________________ (taxes paid in 1977)
1977 $____________________ (taxes paid in 1978)

- over -

14. How satisfied are you with your present job?

_______ very satisfied
_______ fairly satisfied
_______ average satisfaction
_______ very little satisfaction
_______ highly dissatisfied, but intend to stay on the job
_______ highly dissatisfied, and intend to look for a new job

15. Were you out of work at any time (except for the time that you were in school) during 1976? _____ yes _____ no; during 1977? _____ yes _____ no
If yes, how many weeks were you out of work? _____ weeks in 1976
_____ weeks in 1977
Amount of Unemployment Compensation received in 1975? $__________
In 1976? $__________

16. Are you doing what you had planned when you left high school?

_____ yes _____ no
Why? ____
____
____

17. In what way could your high school have given you a better background for the things that you are presently doing?

____
____
____
____

18. Are you satisfied with what you are doing?

_____ yes _____ no
Why? ____
____
____

19. COMMENTS:

Thank you very much for taking the time to complete this survey form.

In order to determine costs and benefits to society for an educational program, taxes become an important element. The major means through which society can recoup the money spent to maintain an educational program is by the increased taxes paid to society by VTAE program graduates. To determine whether or not there is an increase in taxes, and to determine the amount of this increase, question 22 was included in Illustration 2, and question 12 was included in Illustration 3. Through a comparison of these two questions, an increase in taxes can be determined.

A second method to determine the amount of taxes paid by high school graduates with no post-high school education and the taxes paid by VTAE graduates is to assume Federal taxes are equal to 19% of an employee's wages (including Social Security), and that State taxes are equal to 4% of an employee's wages. Therefore, by knowing the wages of a high school graduate or a vocational-technical school graduate, it is safe to assume that 23% of those wages are returned to society in the form of a tax.

The next area for which information is needed is the Job Market Effect of a VTAE graduate. When a VTAE graduate enters the job market, one of three effects should take place - either the VTAE graduate displaces a worker from his/her job, or his/hers fills a vacuum for which no worker is presently available due to lack of training. In many instances, by filling this vacuum, other people remain employed and/or new employees are hired causing what is known as the multiplier effect.

In order to determine the effect of a VTAE graduate, a survey form was developed to be sent to the employer of the VTAE graduate. This form is given in Illustration 4, and from it one can determine the effect of a VTAE graduate on the job market. The form indicates whether or not they are working at a job that requires their particular training, if a high school graduate is capable of performing the job equally as well as the VTAE graduate, whether or not a VTAE graduate affects the rate of absenteeism and the rate of employee turnover for the company, and how well the VTAE graduate was prepared for and able to adjust to his/her job. Taken together, this information will show what type of effect the VTAE graduate is having on the job market.

ILLUSTRATION 4

EMPLOYER SURVEY FORM

1. Graduate's Name: ______________________________

2. Company Name: ______________________________

Address: ______________________________

3. Work Starting Date: ______________________________

4. Starting Job Classification: ______________________________

5. Starting Salary: $______________ per hour

$______________ per month

6. Present Job Classification: ______________________________

7. Present Salary: $______________ per hour

$______________ per month

8. Would you hire a high school graduate with no additional training beyond high school for the above mentioned Starting Job Classification?

_____ yes _____ no Why? ______________________________

____

____

____

If yes, would the high school graduate advance to the Present Job Classification listed above as rapidly as the MPTI graduate?

_____ yes _____ no Comments: ______________________________

____

____

____

9. Has the above identified employee helped to improve your company's or business' rate of absenteeism?

_____ yes _____ no

- over -

10. What is the average stay on the job of the vocational-technical graduates you have hired? ____________________

Is this longer _____ or shorter _______ than the average stay on the job of all employees of your company or business?

11. Please rate the effectiveness of the above identified employee on the following:

	Good				Bad
a. preparation for the job	1	2	3	4	5
b. adjustment to the working situation	1	2	3	4	5
c. increase in company productivity	1	2	3	4	5

Finally, it is necessary to determine some estimates of noneconomic costs and benefits of a vocational-technical education. Included in this area are such things as job satisfaction, leisure time, mobility, employability, community involvement, family involvement, and attitudes and motivation. Many of these noneconomic costs and benefits can be determined from the two survey forms presented in Illustrations 5 and 6.

Job satisfaction can be determined by question 17 in Illustration 5 for VTAE graduates and by question No. 16 in Illustration 6 for high school graduates with no post-high school education. Employability and mobility can be determined by questions 12 through 16 and by question 18 in Illustration 5, and by questions 11 through 15, and question 17 in Illustration 6.

Attitudes are an important measurement to determine the difference between high school graduates with no post-high school education and a vocational-technical graduate. Improvements in attitudes are considered to be a benefit of a VTAE program. Therefore, in order to determine if there is a change in attitudes between the high school and the VTAE graduate, a survey form was developed. This survey form (shown in Illustration 7) consists of three parts with each part relating to a different attitude. The three attitudes are: 1) self-acceptance; 2) attitude toward education; and 3) employment. These are perhaps the three most important attitudes that can be changed by an educational process. If it can be shown that a VTAE graduate has more self-acceptance and a better outlook toward education and employment, it can be stated that not only increased economic benefits, but also increased noneconomic benefits can be derived from a vocational-technical education.

ILLUSTRATION 5

COST BENEFIT FORM

VTAE GRADUATES

1. Check one: _____ male _____ female 2. Age: _______

3. _______ married _______ single _________ divorced

4. Were you _______ married or _______ single when you attended MPTI or LTI?

5. Please describe your health:

_____ excellent _____ very good _____ good _____ less than average
_____ other

6. Describe your parents' occupation(s) according to the following:

Father: ____ blue collar ____ retired Mother: ____ blue collar ____ farming
____ white collar ____ farming ____ white collar ____ homemaker

7. Please check all social organizations, clubs, etc., of which you are a member:

	Type of Organization	Number	Date(s) Joined
___	School Related Organizations		
___	Sportsman Clubs		
___	Church or Religious Organizations		
___	Social Clubs or Societies		
___	Volunteer Work		
___	Fraternal Organizations		
___	Community Services		

8. Did you vote in the presidential election in 1972? _____ yes _____ no

In 1976? _____ yes _____ no Do you plan to vote in 1980? _____ yes _____ no

9. In what year did you graduate from high school? _________

10. Type of high school program: _____ vocational _____ academic (college prep.)

11. Please complete the following:

a. Number of jobs held since high school: _______

Number full time: ________ Number part-time: ___________

b. Number of promotions received: ___________

c. What is the average length of time you spent on a job, considering each promotion as a new job? __________ months

- over -

12. What is your present employment status?
_____ employed full time _____ employed part time
_____ military service _____ unemployed

If you are unemployed, please explain:
_____ homemaker _____ school
_____ looking for a job
_____ other: ____

If you are in school, the name of the school is: ____________________
date of graduation: __________

13. Address of your present employer:
City_________________ County_________________ State__________

14. How long did it take to find a job in your field after graduating from MPTI or LTI? _________ weeks

15. Do you consider your present job to be a permanent occupation?
_____ yes _____ no

16. How many hours do you work during an average week?
_______ hours regular time
_______ hours overtime

17. How satisfied are you with your present job?
______ very satisfied
______ fairly satisfied
______ average satisfaction
______ very little satisfaction
______ highly dissatisfied, but intend to stay on the job
______ highly dissatisfied, but intend to look for a new job

18. Were you out of work at any time (except for the time that you were in school) during 1976? ____ yes ____ no During 1977? ____ yes ____ no
If yes, how many weeks were you out of work? ______ weeks in 1976;
______ weeks in 1977

19. Do you think your occupational future will require you to get more training?
____ yes ____ no If yes, what type of training?
____ vocational
____ on-the-job
____ college
____ other (please specify)____________________________________

20. Do you intend to acquire this additional training? ____ yes ____ no

21. Do you own your own home? ____ yes ____ no

22. COMMENTS:

Thank you very much for taking time to complete this survey form.

ILLUSTRATION 6
COST BENEFIT FORM

HIGH SCHOOL GRADUATE

1. Check one: ____ male ____ female   2. Age: _______

3. ____ married ____ single ____ divorced

4. Please describe your health:
____ excellent ____ very good ____ good ____ less than average ____ poor

5. Describe your parents' occupation(s) according to the following:

Father: __blue collar __retired __white collar __farming
Mother: __blue collar __farming __white collar __homemaker

6. Please list all social organizations, clubs, etc., of which you are a member.

Type of Organization	Number of Organizations	Date Joined
___ School Related Organization	____________	___________
___ Sportsman Clubs	____________	___________
___ Church or Religious Organizations	____________	___________
___ Social Clubs or Societies	____________	___________
___ Volunteer Work	____________	___________
___ Fraternal Organizations	____________	___________
___ Community Services	____________	___________

7. Did you vote in the presidential election in 1972? _____ yes _____ no
In 1976? ____ yes ____ no Do you plan to vote in 1980? ____ yes ____ no

8. In what year did you graduate from high school? ________

9. Type of high school program: _______ vocational ________ academic (college prep.)

10. Please complete the following:

a. Number of jobs held since high school? __________
Number full time:________ Number part time: __________

b. Number of promotions received: _____________

c. What is the average length of time you spent on a job, considering each promotion as a new job? _________ months

11. What is your present employment status?
____ employed full time
____ military service
____ employed part time
____ unemployed
____ student
If you are unemployed, please explain: ____ homemaker ____ school
____ looking for a job
____ other: _______________________
If you are in school, the name of the school is: _______________________________
date of graduation: ______

- over -

12. How long did it take to find a job in your field after graduating from high school? ______________ weeks

13. Employer's address: City_______________ County_______________ State___________

14. Do you consider your present job to be a permanent occupation? ____ yes ____ no

15. How many hours do you work during an average week? _________ hours regular
_________ hours overtime

16. How satisfied are you with your present job?
_____ very satisfied
_____ fairly satisfied
_____ average satisfaction
_____ very little satisfaction
_____ highly dissatisfied, but intend to stay on the job
_____ highly dissatisfied, and intend to look for a new job

17. Were you out of work at any time (except for the time that you were in school) during 1976? ____ yes ____ no During 1977? ____ yes ____ no
If yes, how many weeks were you out of work? ________ weeks in 1976
________ weeks in 1977
Amount of Unemployment Compensation received in 1976: $___________
In 1977: $___________

18. Do you think your occupational future will require you to get more training?
____ yes ______ no
If yes, what type of training? _________ vocational-technical
_________ on-the-job
_________ college
_________ other (please specify)
____

Do you intend to acquire this additional training? _______ yes _______ no

19. Are you doing what you had planned when you left high school? ____ yes ____ no
Why?____
____
____

20. In what way could your high school have given you a better background for the things that you are presently doing? ______________________________
____
____
____

21. Are you satisfied with what you are doing? ____ yes _____ no
Why?____
____
____

22. Do you own your own home? _______ yes ________ no

23. COMMENTS:

Thank you very much for taking time to complete this survey form.

Illustration 7

ATTITUDE SURVEY

Self-Acceptance: The following is a list of statements concerning yourself. You are to respond to each statement by circling the number which indicates to what extent you agree with the statement. Remember, there are no right or wrong answers. The best answer is what you feel is true of yourself.

		Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
*1)	I enjoy myself most when I'm alone	1	2	3	4	5
*2)	When someone asks advice about a personal problem, I usually say "It's up to you to decide", rather than tell him what he should do.	1	2	3	4	5
*3)	I know I'm not the person I pretend to be, I guess I put on a show to impress other people.	1	2	3	4	5
*4)	In general, a person has to fight his way through life. This means that if someone stands in the way, he will be hurt.	1	2	3	4	5
*5)	I'm afraid for people I like to find out what I'm really like for fear they will be disappointed in me.	1	2	3	4	5
*6)	I don't say much at a social affair, as I'm afraid people will criticize me or laugh at me if I say the wrong thing.	1	2	3	4	5
*7)	I prefer to be alone to having a close friendship with any of the people around me.	1	2	3	4	5
8)	I'm not afraid to meet new people. I feel I'm a worthwhile person and there's no reason, why they should dislike me.	1	2	3	4	5
*9)	If it'll help me get what I want in life, I see no objection to stepping on other people's toes.	1	2	3	4	5

		Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
*10)	I feel self-conscious when I'm with people who have a superior position to mine in business or in school.	1	2	3	4	5
*11)	When I'm in a group I usually don't say much for fear of saying the wrong thing.	1	2	3	4	5
*12)	I have a tendency to sidestep my problems.	1	2	3	4	5
13)	I seldom worry about other people. I'm really pretty self-centered.	1	2	3	4	5
14)	I can be comfortable dealing with all types of people.	1	2	3	4	5
15)	I can become so absorbed in the work I'm doing, that it doesn't bother me not to have any intimate friends.	1	2	3	4	5
*16)	I don't approve of spending time and energy in doing things for others. I'm for looking after my family and myself and letting others fend for themselves.	1	2	3	4	5
*17)	When people say nice things about me, I find it hard to believe they really mean it. I think they probably are just kidding me.	1	2	3	4	5
*18)	I often tell people what to do when they are having trouble in making a decision.	1	2	3	4	5
*19)	If people are weak and inefficient, I tend to take advantage of them. You must be strong to achieve your goals.	1	2	3	4	5
*20)	I am easily irritated by people who argue with me.	1	2	3	4	5
21)	In dealing with younger persons, I trust they can do a good job.	1	2	3	4	5
*22)	There are very few times that I compliment people for their talents, or for jobs they've done.	1	2	3	4	5
23)	I enjoy doing little favors for people even if I don't know them very well.	1	2	3	4	5
*24)	I'd like it if I could find someone who would tell me how to solve my personal problems.	1	2	3	4	5

		Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
*25)	I don't hesitate to urge people to live by the same high set of values which I myself have.	1	2	3	4	5
26)	I can be friendly with people who do things which I consider to be wrong.	1	2	3	4	5
*27)	I'm quite shy and self-conscious in social situations.	1	2	3	4	5
28)	I feel confident that I can do something about the problems that may arise in the future.	1	2	3	4	5
*29)	In order to get along and be liked, I do what people expect of me rather than anything else.	1	2	3	4	5
30)	I look on most of the attitudes and feelings I have toward other people as being quite natural and acceptable.	1	2	3	4	5

Attitude toward education: The following list of statements concern education. They should be answered in the same manner as the above statements. Remember, the correct answer is how you feel about the statement.

1)	Education encourages an individual to think for himself.	1	2	3	4	5
2)	Education prepares people to face the problems of real life when they get out of school.	1	2	3	4	5
*3)	You can enjoy life more without the pressures of a post-high school education.	1	2	3	4	5
4)	A post-high school education is worth the time and effort it requires.	1	2	3	4	5
*5)	Education doesn't teach you what to do during your leisure time.	1	2	3	4	5
*6)	Getting work experience is more important than getting an education.	1	2	3	4	5

		Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
7)	Education will tend to promote solutions to the world's problems.	1	2	3	4	5
8)	Vocational, technical courses are practical.	1	2	3	4	5
*9)	School is for intelligent people, to help them get ahead.	1	2	3	4	5
*10)	A person can learn more by going to vocational school for 2 years than if he were working 2 years during that time.	1	2	3	4	5
*11)	A person is foolish to keep on going to school after he finishes high school if he can get a job.	1	2	3	4	5
12)	A post-high school education makes a person a better citizen in this country.	1	2	3	4	5

Employment: The following are 25 statements about your job. If you are unemployed, you may skip the remainder of this survey. If you are working, however, please continue to respond to these statements in the same manner as you did to the above statements.

1)	I try hard to do high quality work.	1	2	3	4	5
*2)	I consider my job temporary for me.	1	2	3	4	5
*3)	It pays to do nothing and let the community support me.	1	2	3	4	5
4)	I want to work to support my family.	1	2	3	4	5
*5)	My boss could replace me tomorrow.	1	2	3	4	5
*6)	My job is boring.	1	2	3	4	5
7)	The highest responsibility a man has is toward earning a living.	1	2	3	4	5
*8)	My dream is for a job with a minimum amount of work for a maximum amount of pay.	1	2	3	4	5
9)	My boss cares about me and my job.	1	2	3	4	5

		Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
*10)	I would like to change to another occupation.	1	2	3	4	5
11)	I am well trained for my present job.	1	2	3	4	5
*12)	I never worry about material things such as food or clothing.	1	2	3	4	5
13)	There is a good future for me in my present job.	1	2	3	4	5
14)	I would like to change to a different employer, but keep the same job.	1	2	3	4	5
*15)	Once I'm out of a job, I'll enjoy being idle for a time before looking for another job.	1	2	3	4	5
16)	I don't mind having to support myself.	1	2	3	4	5
17)	I'm really trying hard to hold onto my job.	1	2	3	4	5
18)	I work hard, earn a living, and don't expect to have what I can't afford.	1	2	3	4	5
*19)	Work is something to be avoided, if possible.	1	2	3	4	5
*20)	It's O.K. for me to be absent when I feel like it.	1	2	3	4	5
21)	I like the people I work with.	1	2	3	4	5
*22)	The responsibility for making a living shouldn't be so important that one doesn't have time for anything else.	1	2	3	4	5
23)	Sometimes I want to earn my own living and sometimes I doubt it.	1	2	3	4	5
*24)	The only thing I want from my job is the paycheck.	1	2	3	4	5
25)	I feel my family has benefited from my job as we have a happier home life.	1	2	3	4	5

THANK YOU FOR YOUR OPINIONS!

To score the results of the Attitude Survey, the following directions should be followed. Scores are given at the right-hand side of the questionnaire ranging from one (1) for Strongly Agree to five (5) for Strongly Disagree. Questions preceded by an asterisk are worded negatively and the score should be reversed before being counted. Once all negative statements have been reversed, the scores can be counted, with the lower the score meaning the higher the attitude. In other words, there is an inverse proportion between the score and the desired attitudes.

Once all measurements of Costs and Benefits have been established, they can be analyzed by three separate methods. These methods are described by the following formulas:

1) Rate of Return

$$\sum_{T=0}^{N} \frac{B_T - C_T}{(1+r)^T} = 0$$

2) Present Value of Benefits

$$\sum_{T=0}^{N} \frac{B_T - C_T}{(1+i)^T}$$

3) Cost Benefit Ratio

$$\frac{\sum_{T=0}^{N} \frac{B_T}{(1+i)^T}}{\sum_{T=0}^{N} \frac{C_T}{(1+i)^T}}$$

Legend

B = total benefits
C = total costs
N = number of years spanning the study
Σ
T=0
i = social discount rate (7%)
r = rate of return

A final method of comparing costs to benefits, in addition to the three methods just described, is to determine the length of the payback period. The payback period is equal to the number of years required for an individual or for society to recoup the money spent on an educational program. It can be illustrated by the following formula:

$$\sum_{T=0}^{N} B_T - \sum_{T=0}^{N} C_T = 0$$

COST BENEFIT MODEL DEVELOPMENT - ADULT EDUCATION COURSES

In addition to the Model that was developed to determine costs and benefits of full-time VTAE programs, another Model was developed to evaluate the costs and the benefits of aidable, noncredit adult education courses. Information included in this Model for the adult education courses is included in Table 7. These costs and benefits relate to both society and to the individual student, with some being economic in nature and some being noneconomic in nature.

Most of the information required to determine the costs and the benefits is obtainable from the survey form contained in Illustration 8. This survey form was developed to be sent out to recent completers of the adult education course being evaluated. The information requested in questions 1 and 2 should be filled in before the survey form is mailed, thereby alerting the recipient of the survey form what course they should provide information for in the remaining questions.

When the survey forms have been returned, the information should be totaled for each adult education course being analyzed. Once this is completed, Student Costs can be determined by questions 6, 9, 11,and 13, and Student Benefits can be determined by questions 5, 6, 7, 8, 11, 12, 15,and 16. In order to determine Social Costs, it is necessary for Community Services or the Business Office to supply information on instructor salaries,clerical costs, supervisory salaries, building rental fees, and advertisement costs. The total amount of these listed Social Costs equals the Economic Social Cost for the course. In addition to these Economic Costs, the Noneconomic Social Cost can be determined by questions 10 and 11. Social Benefits can be determined by questions 5, 11, 12, 13, and 15.

TABLE 7

BENEFITS AND COSTS - ADULT EDUCATION

COSTS

1. Tuition = $6.80 per 40-hour course (40 hours = 1 credit)
2. Materials = $1.00 - $10.00, $2.00 minimum
3. Books and Supplies
4. Instructor Cost = $5.50 - $9.00
5. Clerical Cost, if applicable
6. Supervisor's Salary
7. Cancelled Class Cost
8. Building rental = $5.00/session - classroom
   $10.00/session - labs
   $15.00/session - shops
9. Travel Expenses
10. Loss of part-time job
11. Loss of one night per week
12. Advertisement
13. Decreased community involvement
14. Lack of adequate attendance

BENEFITS

1. Satisfaction - increased or decreased
2. Income gain
3. Is one night out per week a benefit?
4. Attitude changes
5. Value of the information learned in the course to the student
6. Positive effects on the student's job and on the company he/she works for
7. Employer is paying for the course
8. Socializing
9. Updated or new job skills
10. More knowledgeable society

ILLUSTRATION 8

ADULT EDUCATION SURVEY FORM

1) Name:

2) Course taken this year (1976-77): ____________________

3) Previous courses taken: Please list your four most recent courses.

a. ____________________
b. ____________________
c. ____________________
d. ____________________

4) Employed ☐

a. ☐ full-time
b. ☐ part-time

Unemployed ☐

a. ☐ in school
b. ☐ homemaker
c. ☐ looking for a job
d. ☐ other: ____________________

5) Reason for taking this course (check all that apply)

☐ Related to my job
☐ Personal information - not related to my job
☐ To update my skills
☐ Retraining for my job
☐ Training for another job
☐ Other (please specify) ____________________

6) Is one night a week at class a cost or a benefit to you?

☐ cost ☐ benefit

7) Is socializing with other students an important part of this class?

☐ yes ☐ no

8) Is your employer reimbursing you for this course?

☐ yes ☐ no How much? __________

9) Are you giving up a part-time job to attend this course? ☐ yes ☐ no

Type of Job: ____________________ Hours Worked per Week: __________

Lost Income = $ __________

10) Did you give up any community activities (clubs, volunteer work, etc.) in order to take this class?

☐ yes ☐ no

If yes, what type of community activity? ____________________

How much time did you devote to this activity per week? __________ hours

- over

11) How satisfied are you with the course?

1. ☐ very satisfied 2. ☐ satisfied 3. ☐ not satisfied

Comments: ____

____

____

____

12) Did the course increase your satisfication with your present job?

1. ☐ yes 2. ☐ no

13) From an economic point of view how much did it cost you to take this course?

Travel back and forth to this course $ ____________

Tuition plus Materials cost $ ____________

Other costs (please specify) $ ____________

$ ____________

TOTAL COST $ ____________

14) This cost was 1. ☐ too high in relation to the information I learned.
2. ☐ just right
3. ☐ too low

15) What dollar value would you assign to the information learned in this course?

____$0 ____$5 ____$10 ____$25 ____$50 ____$75 ____$100 ____$250 ____$500 ____ $____

16) Did taking this course increase your income from your job?

1. ☐ yes 2. ☐ no

Total gain in income per month = $ ____________

THANK YOU VERY MUCH FOR COMPLETING THIS FORM!!!

This concludes this section of the final report containing the Cost Benefit Model. This Model was tested on a sample of six full-time programs, two each from the Moraine Park, Lakeshore, and North Central Technical Institutes. The Model was also tested on a sample of sixty-three aidable, noncredit adult education courses from the same three technical institutes. The results from the full-time programs and adult education courses are presented in the following section of this report.

RESULTS OF TEST PROGRAMS

RESULTS

FULL-TIME PROGRAMS

Nine full-time programs, four from the Lakeshore Technical Institute, three from the Moraine Park Technical Institute, and two from the North Central Technical Institute, were selected to test the Cost Benefit Analysis Model described in the previous section of this report. These nine programs represent the second time the Cost Benefit Analysis Model has been tested and refined. In a Cost Benefit Study conducted during 1975-76, eight full-time programs were evaluated using this Model. Therefore, the methods described in this report have proven to be an effective way to evaluate the costs and benefits of an excellent cross section of vocational-technical programs.

In the present study, the programs being analyzed include Mechanical Design, Graphic Arts, Auto Body Repair, and Fashion Merchandising from LTI; Data Processing, Engine Technology, and Auto Body Repair from MPTI, and Electronics and Clerk-Typist from NCTI. The Graphic Arts, Auto Body Repair, Data Processing, and Clerk-Typist Programs are one-year Diploma Programs, while the Mechanical Design, Fashion Merchandising, Engine Technology, and Electronics Programs are two-year Associate Degree Programs. Information gathered for the one-year programs relates to the 1975-76 school year, and information gathered for the two-year programs relates to the 1974-75 and the 1975-76 school years.

The first step in determining the Cost Benefit Relationship for the programs was to obtain names and addresses of pertinent vocational-technical school graduates and names and addresses of high school graduates. The former were relatively easy to acquire, the latter were more difficult to obtain, due to the confidentiality of student records. However, an adequate list of names and addresses was obtained for each group. The names and addresses for the high school graduates came from high schools in all three participating VTAE districts.

In addition to names and addresses for graduates, names and addresses of the employers of the VTAE graduates were also obtained. A survey form was developed and sent to the employers (see Appendix D) in order to collect information on the Job Market Effect of the VTAE graduates. It was important to discover if VTAE graduates were actually required for the jobs they held, or if they were simply taking jobs for which high school graduates would be qualified.

Seventy-nine survey forms were sent out to the employers of the 1975 and 1976 graduates of the nine vocational-technical programs included in this study. Forty-five were returned, for a return of 57%. The information from these survey returns is contained in Table 8. The information shows that 59% of the jobs taken by VTAE graduates require the special skills learned in the particular vocational-technical program, and in over half (62%) of the remaining jobs, VTAE graduates were promoted to an advanced position more rapidly than a comparable high school graduate.

The names and addresses of the VTAE graduates and the high school graduates were used to send out two similar survey forms, one to each group. By asking both VTAE graduates and high school graduates to complete and return the similar survey forms, a comparison could be made between the two groups. These two survey forms, along with their cover letters, are included in Appendixes A and B.

During the year, 244 survey forms were sent out to Lakeshore, Moraine Park, and North Central graduates, with 63 being returned. This represents a return of 26%. This percentage of return was rather low; however, enough information was collected to provide the desired information on VTAE graduates. The information obtained from these survey form returns is contained in Table 9 on pages 49 through 55.

In order to make a comparison between the information on VTAE graduates and high school graduates, a similar survey form was sent out to graduates from a private high school and to academic and vocational graduates from three public high schools. The high schools selected to participate represent all three participating VTAE districts. A total of 759 survey forms were sent out to the high school graduates, with 283 or 37% being returned. Information generated from these survey form returns was considered excellent, and it is presented in Table 9 along with the information generated from the survey forms sent to the VTAE graduates.

Both the VTAE graduate totals and the high school totals are also given in Table 9 in order that comparisons can be made between the two groups.

TABLE 8
JOB MARKET EFFECT QUESTIONNAIRE RESULTS

	A	B	C	D		E		F		G			H		
	Respondants	Starting Salary	Present Salary	Would the Employer hire a high school graduate for this job		If yes, would they be promoted to the present job as quickly as a VTAE graduate?		Has VTAE Employee improved your company's rate of absenteeism		Average stay on the job for VTAE graduates	Shorter than Average Employee	Longer than Average Employee	VTAE graduate effectiveness: scale of 0 - 5: 0 = Good 5 = Bad		
				Yes	No	Yes	No	Yes	No				Preparation for job	Adjustment to working situation	Increase in company productivity
LTI Mechanical Design	7	3.49 650.00	4.63 820.67	1	5	1	1	5	2	3 years	?	?	2.3	1.8	2.2
LTI Graphic Arts	8	2.70 520.00	4.15 727.50	4	4	0	3	8	0	?	?	?	1.3	1.3	1.3
LTI Auto Body Repair	5	2.85 532.25	4.27 919.21	1	4	0	2	5	0	?	0	2	1.8	1.6	2.2
LTI Fashion Merchandising	3	2.30 –	3.05 –	3	0	2	1	1	1	3.3 years	?	?	2.7	1.3	1.7
MPTI Data Processing	9	3.13 433.00	3.70 524.60	5	4	3	3	5	3	?	1	3	2.0	2.1	2.3
MPTI Engine Technology	7	3.69 826.25	4.75 882.75	0	7	0	1	1	2	?	2	2	2.0	2.7	3.0
MPTI Auto Body Repair	6	2.95 530.50	3.59 652.00	4	2	2	2	2	3	3.5 years	4	1	2.7	2.5	2.8
NCTI Electronics	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
NCTI Clerk-Typist	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Private High School	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Academic Public High School	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Vocational Public High School	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
SUB TOTAL NCTI	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
SUB TOTAL LTI	23	2.92 568.56	4.18 808.04	9	13	3	7	19	3	3.1 years	0	2	1.9	1.5	1.8
SUB TOTAL MPTI	22	3.26 584.72	4.00 673.31	9	13	5	6	8	8	3.5 years	7	6	2.2	2.3	2.6
TOTAL VTAE GRADUATES	45	3.09 576.46	4.09 742.17	41% 18	59% 26	38% 8	62% 13	71% 27	29% 11	3.2 years	7	8	2.0	1.9	2.1
SUB TOTAL ACADEMIC HIGH SCHOOL	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
SUB TOTAL CAPSTONE HIGH SCHOOL	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
TOTAL HIGH SCHOOL GRADUATE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

TABLE 9
COST BENEFIT QUESTIONNAIRE RESULTS

	I			J		K				L			M				
	Questionnaire									Were you ______? while at LTI or MPTI			Health				
	Number Sent Out	Number Returned	%	Male	Female	Married	Single	Divorced	Widow or Separated	Married	Single	Other	Excellent	Very Good	Good	Fair	Poor
LTI Mechanical Design	12	3	25%	3	0	0	3	0	0	0	3	0	2	0	1	0	0
LTI Graphic Arts	12	4	33%	3	1	1	3	0	0	0	4	0	2	1	1	0	0
LTI Auto Body Repair	9	2	17%	2	0	0	2	0	0	0	2	0	2	0	0	0	0
LTI Fashion Merchandising	11	5	45%	0	5	2	3	0	0	0	5	0	3	2	0	0	0
MPTI Data Processing	25	6	24%	1	5	1	5	0	0	0	6	0	4	1	1	0	0
MPTI Engine Technology	15	4	27%	4	0	1	3	0	0	1	3	0	2	2	0	0	0
MPTI Auto Body Repair	30	6	20%	6	0	1	5	0	0	0	6	0	4	2	0	0	0
NCTI Electronics	50	20	40%	20	0	6	14	0	0	2	18	0	12	7	1	0	0
NCTI Clerk-Typist	80	13	17%	0	13	3	10	0	0	3	10	0	8	2	2	1	0
Private High School	172	62	36%	28	34	0	62	0	0	–	–	–	35	21	5	1	0
Academic Public High School	292	100	34%	46	54	7	93	0	0	–	–	–	45	41	7	0	0
Vocational Public High School	295	121	41%	43	78	14	106	0	0	–	–	–	73	30	17	1	0

	Number Sent Out	Number Returned	%	Male	Female	Married	Single	Divorced	Widow or Separated	Married	Single	Other	Excellent	Very Good	Good	Fair	Poor
SUB TOTAL NCTI	130	33	26%	20	13	9	24	0	0	5	28	0	20	9	3	1	0
SUB TOTAL LTI	44	14	32%	8	6	3	11	0	0	0	14	0	9	3	2	0	0
SUB TOTAL MPTI	70	16	23%	11	5	3	13	0	0	1	15	0	10	5	1	0	0
TOTAL VTAE GRADUATES	244	63	26%	39	24	15	48	0	0	6	57	0	39	17	6	1	0

	Number Sent Out	Number Returned	%	Male	Female	Married	Single	Divorced	Widow or Separated	Married	Single	Other	Excellent	Very Good	Good	Fair	Poor
SUB TOTAL ACADEMIC HIGH SCHOOL	464	162	35%	74	88	7	155	0	0	–	–	–	80	62	12	1	0
SUB TOTAL CAPSTONE HIGH SCHOOL	295	121	41%	43	78	14	106	0	0	–	–	–	73	30	17	1	0
TOTAL HIGH SCHOOL GRADUATES	759	283	37%	127	166	21	261	0	0	–	–	–	153	92	29	2	0

TABLE 9 Continued
COST BENEFIT QUESTIONNAIRE RESULTS

	N								O						P							
	Parents Occupations								Did You Vote In						In What Year Did You Graduate From High School							
	Father				Mother				1972		1976		1980									
	Blue Collar	White Collar	Farm-	Retire	Blue Collar	White Collar	Farm	Home	Yes	No	Yes	No	Yes	No	1976	1975	1974	1973	1972	1971	Before 1971	Didn't Graduated
LTI Mechanical Design	3	0	0	0	1	0	0	2	2	1	3	0	3	0	–	–	–	1	1	1	–	–
LTI Graphic Arts	2	2	0	0	0	2	0	2	2	2	4	0	3	0	–	–	1	1	1	–	1	–
LTI Auto Body Repair	1	0	0	0	0	1	0	1	0	2	1	1	2	0	–	–	2	–	–	–	–	–
LTI Fashion Merchandising	1	1	2	1	3	0	2	2	1	4	4	1	5	0	–	–	3	–	2	–	–	–
MPTI Data Processing	2	1	1	0	2	1	0	2	2	4	4	2	6	0	–	1	4	1	–	–	–	–
MPTI Engine Technology	3	0	1	0	2	0	0	2	2	2	4	0	4	0	–	–	1	1	–	–	2	–
MPTI Auto Body Repair	2	2	1	0	0	2	0	4	0	6	6	0	6	0	–	1	4	1	–	–	–	–
NCTI Electronics	14	4	2	1	4	4	1	11	6	13	15	4	19	0	1	–	8	4	4	1	2	–
NCTI Clerk-Typist	4	1	2	2	1	1	2	8	2	10	10	2	12	0	–	3	5	2	–	1	1	–
Private High School	20	25	6	4	6	17	3	35	0	57	60	2	61	0	62	–	–	–	–	–	–	–
Academic Public High School	40	39	8	6	10	28	2	51	1	90	74	24	85	6	58	43	–	–	1	–	–	–
Vocational Public High School	53	31	23	7	23	17	10	71	1	108	87	31	107	6	86	34	–	–	–	–	–	–

SUB TOTAL NCTI	18	5	4	3	5	5	3	19	8	23	25	6	31	0	1	3	13	6	4	2	3	0
SUB TOTAL LTI	7	3	2	1	4	3	2	7	5	9	12	2	13	0	0	0	6	2	4	1	1	0
SUB TOTAL MPTI	7	3	3	0	4	3	0	8	4	12	14	2	16	0	0	2	9	3	0	0	2	0
TOTAL VTAE GRADUATES	32	11	9	4	13	11	5	34	17	44	51	10	60	0	1	5	28	11	8	3	8	0

SUB TOTAL ACADEMIC HIGH SCHOOL	60	64	14	10	16	45	5	86	1	147	134	26	146	6	117	43	–	–	1	–	–	–
SUB TOTAL CAPSTONE HIGH SCHOOL	53	31	23	7	23	17	10	71	1	108	87	31	107	6	86	34	–	–	0	–	–	–
TOTAL HIGH SCHOOL GRADUATES	113	95	37	17	39	62	15	157	2	255	221	57	253	12	203	77	–	–	1	–	–	–

TABLE 9 Continued
COST BENEFIT QUESTIONNAIRE RESULTS

	Q			R			S			T			U			V			W
	Did you take out any loans?			Receive any Scholarship or Grant			Receive any Unemployment Compensation			Receive any Social Security			City, State or Federal Subsidy			Veterans Benefits			Average Earnings as a Student Per year
	Yes	No	Ave. Amount	Yes	No	Ave. Amount	Yes	No	Ave. Amount	Yes	No	Ave. Amount	Yes	No	Ave. Amount	Yes	No	Ave. Amount	
LTI Mechanical Design	0	3	–	2	1	$ 250	0	3	–	0	3	–	0	3	–	0	3	–	$1,783
LTI Graphic Arts	1	3	$1,500	0	4	–	0	4	–	0	4	–	0	4	–	0	4	–	$1,548
LTI Auto Body Repair	0	2	–	0	2	–	0	2	–	0	2	–	0	2	–	0	2	–	$2,000
LTI Fashion Merchandising	3	2	$1,295	4	1	$ 150	0	5	–	0	5	–	0	5	–	0	5	–	$ 700
MPTI Data Processing	0	5	–	4	2	$ 790	0	6	–	2	4	$2,250	1	5	$ 600	1	5	$ 564	$ 450
MPTI Engine Technology	2	2	$2,150	0	4	–	1	3	$4,560	0	4	–	1	3	$ 600	1	3	$4,800	$2,700
MPTI Auto Body Repair	1	5	$ 750	1	5	$ 250	1	5	?	1	5	$1,680	0	6	–	0	6	–	$3,976
NCTI Electronics	4	16	$ 788	9	11	$ 864	0	20	–	1	19	$ 744	1	19	$ 500	2	18	$3,180	$1,567
NCTI Clerk-Typist	4	7	$ 631	5	6	$ 691	0	11	–	3	8	$2,366	1	10	$1,200	1	10	$ 684	$ 878
Private High School	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Academic Public High School	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Vocational Public High School	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
SUB TOTAL NCTI	8	23	$ 710	14	17	$ 802	0	31	–	4	27	$1,961	2	29	$ 850	3	28	$2,348	$1,469
SUB TOTAL LTI	4	10	$1,346	6	8	$ 163	0	14	–	0	14	–	0	14	–	0	14	–	$1,411
SUB TOTAL MPTI	3	12	$1,683	5	11	$ 682	2	14	$4,560	3	13	$2,060	2	14	$ 600	2	14	$2,682	$2,191
TOTAL VTAE GRADUATES	15	45	$1,074	25	36	$ 630	2	59	$4,560	7	54	$2,003	4	57	$ 725	5	56	$2,482	$1,664
SUB TOTAL ACADEMIC HIGH SCHOOL	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
SUB TOTAL CAPSTONE HIGH SCHOOL	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
TOTAL HIGH SCHOOL GRADUATES	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

TABLE 9 Continued
COST BENEFIT QUESTIONNAIRE RESULTS

	X	Y	Z				AA	BB	CC					DD	EE		FF
	Average Cost of Tuition Books and School Fees	Average Earnings Year Before Entering MPTI or LTI	Residence while in School				Cost of Residence Per Month	Miles Driven or Walked to school (One Way)	Present Employment Status					Length of Time Finding a Job After Graduation	Is present job considered permanent?		Hours Worked Per Week
			At Home	Apartment	Private Room	Other			Full-Time	Part-Time	Military	Student	Unemployed		Yes	No	
LTI Mechanical Design	$ 285	$2,000	3	1	0	0	$ 130	15.8	3	0	0	0	0	0 weeks	3	0	38.3 0
LTI Graphic Arts	$ 378	$3,144	4	0	0	1	$ 100	22.3	3	0	0	1	1	3 weeks	2	1	40 5.3
LTI Auto Body Repair	$ 500	$1,800	2	0	0	0	$ 20	18.5	2	0	0	0	0	25 weeks	2	0	42.5 3.3
LTI Fashion Merchandising	$ 300	$1,100	2	2	0	2	$ 130	10	4	0	0	0	1	6 weeks	3	1	39 5
MPTI Data Processing	$1,110	$ 700	4	2	2	0	$ 106	2	2	1	0	3	3	8 weeks	2	2	32 0
MPTI Engine Technology	$ 600	$3,433	2	1	1	0	$ 94	19	4	0	0	0	0	13 weeks	2	2	40 5
MPTI Auto Body Repair	$ 373	$3,060	6	1	0	0	$ 83	19	3	0	0	1	2	18.5 weeks	3	2	36 0
NCTI Electronics	$ 461	$1,550	6	13	2	3	$ 90	6.5	18	0	1	1	1	8.2 weeks	10	9	40.1 4
NCTI Clerk-Typist	$ 246	$ 470	8	2	0	3	$ 82	8.6	8	0	0	1	4	18.9 weeks	5	5	39.5 5.0
Private High School	–	–	–	–	–	–	–	–	16	23	0	30	4	8 weeks	5	34	39.6 8.9
Academic Public High School	–	–	–	–	–	–	–	–	19	37	2	55	15	13.2 weeks	9	58	37.6 7.0
Vocational Public High School	–	–	–	–	–	–	–	–	60	26	10	26	16	12.7 weeks	36	54	41.5 4.0

SUB TOTAL NCTI	$ 387	$1,403	14	15	2	6	$ 87	7.2	26	0	1	2	5	11 weeks	15	14	39.9 4.2
SUB TOTAL LTI	$ 348	$2,044	11	3	0	3	$ 111	15.7	12	0	0	1	2	7 weeks	10	2	39.6 3.8
SUB TOTAL MPTI	$ 686	$2,733	12	4	3	0	$ 94	12.9	9	1	0	4	5	13 weeks	7	6	35.5 1.3
TOTAL VTAE GRADUATES	$ 461	$1,902	37	22	5	9	$ 95	10.8	47	1	1	7	12	11 weeks	32	22	38.7 2.8

SUB TOTAL ACADEMIC HIGH SCHOOL	–	–	–	–	–	–	–	–	35	50	2	86	19	11.2 weeks	14	92	38 7.4
SUB TOTAL CAPSTONE HIGH SCHOOL	–	–	–	–	–	–	–	–	60	26	10	26	16	12.7 weeks	36	54	41.5 4.0
TOTAL HIGH SCHOOL GRADUATES	–	–	–	–	–	–	–	–	95	86	12	111	35	11.8 weeks	50	146	39.9 5.6

TABLE 9 Continued
COST BENEFIT QUESTIONNAIRE RESULTS

	GG	HH	II	JJ	KK						
	Salary Received in First Position After High School	Salary Received in First Position After MPTI or LTI or NCTI	Current Annual Salary (Average)	Average Additional Income	Federal and State Income Taxes						
					1970	1971	1972	1973	1974	1975	1976
LTI Mechanical Design	$4,580.00	$8,080.00	$9,830.67	None	–	–	–	$ 4.00	$500.00	$1,100.00	?
LTI Graphic Arts	$5,125.87	$6,900.00	$8,400.00	None	–	–	$243.45	$519.44	$593.31	$ 617.24	?
LTI Auto Body Repair	$4,160.00	$8,557.13	$9,750.00	$2,000.00	–	–	–	–	–	–	–
LTI Fashion Merchandising	$3,681.60	$5,135.00	$6,390.00	None	–	–	–	–	?	$ 547.40	?
MPTI Data Processing	$3,100.00	$6,400.00	$6,620.00	None	–	–	–	–	–	–	–
MPTI Engine Technology	$2,304.00	$8,213.33	$10,225.00	None	–	–	–	–	$ 52.00	$ 320.67	?
MPTI Auto Body Repair	$4,319.50	$6,963.90	$8,540.00	$1,875.00	–	–	–	–	$500.00	$ 388.50	?
NCTI Electronics	$3,947.75	$7,190.46	$8,737.78	$3,283.33	–	$311.03	$290.00	$101.18	$277.21	$ 825.24	?
NCTI Clerk-Typist	$5,524.00	$5,235.90	$5,919.61	None	–	–	$ 80.00	–	$204.00	$ 319.25	?
Private High School	$5,588.44	–	$6,115.89	None	–	–	–	–	$700.00	$ 501.00	$478.45
Academic Public High School	$5,314.80	–	$5,617.60	$2,501.75	–	–	–	–	$174.36	$ 209.87	$304.07
Vocational Public High School	$4,924.54	–	$6,003.98	$ 684.03	–	–	–	$496.00	$742.02	$ 992.43	$807.39
SUB TOTAL NCTI	$4,234.34	$6,492.40	$8,007.14	$3,283.33	0	$311.03	$235.56	$101.18	$258.23	$ 694.06	?
SUB TOTAL LTI	$4,407.49	$7,041.73	$8,164.77	$2,000.00	0	0	$243.45	$521.44	$553.32	$ 708.83	?
SUB TOTAL MPTI	$3,364.86	$7,239.40	$8,621.67	$1,875.00	0	0	0	0	$300.89	$ 358.35	?
TOTAL VTAE GRADUATES	$4,060.26	$6,786.65	$8,188.36	$2,496.43	0	$311.03	$236.57	$287.96	$315.20	$ 634.81	?
SUB TOTAL ACADEMIC HIGH SCHOOL	$5,375.61	–	$5,835.95	$2,501.75	–	–	–	–	$367.76	$ 316.98	$368.23
SUB TOTAL CAPSTONE HIGH SCHOOL	$4,924.54	–	$6,003.98	$ 684.03	–	–	–	$496.00	$742.02	$ 992.43	$807.39
TOTAL HIGH SCHOOL GRADUATES	$5,133.49	–	$5,911.09	$1,414.10	–	–	–	$496.00	$569.63	$ 627.14	$569.88

TABLE 9 Continued
COST BENEFIT QUESTIONNAIRE RESULTS

	LL						MM						NN					
	Job Satisfaction						Out of Work						Will your occupational future require you to get additional training?					
							1975			1976								
	Very Satisfied	Fairly Satisfied	Average Satisfaction	Very Little Satisfaction	Highly Dissatisfied Stay on Job	Highly Dissatisfied New Job	Yes	No	Ave. Length	Yes	No	Ave. Length	Yes	No	Vocational Technical	OJT	College	Other
LTI Mechanical Design	1	1	2	0	0	0	0	3	–	0	3	–	3	0	2	2	0	0
LTI Graphic Arts	2	0	0	1	0	0	1	3	17w	1	3	19w	4	0	0	2	1	1
LTI Auto Body Repair	1	1	0	0	0	0	0	2	–	1	1	16w	2	0	0	2	0	0
LTI Fashion Merchandising	2	2	0	0	0	0	2	3	3w	2	3	3w	3	2	0	3	0	0
MPTI Data Processing	0	2	1	0	0	0	2	1	4w	2	1	4w	3	0	1	1	1	0
MPTI Engine Technology	1	1	1	0	0	1	0	4	–	0	4	–	3	1	1	1	1	1
MPTI Auto Body Repair	1	0	1	1	0	1	1	5	8w	2	4	12w	2	3	0	2	0	0
NCTI Electronics	6	5	5	2	0	1	3	16	9.6w	5	14	9.6w	17	3	4	11	2	2
NCTI Clerk-Typist	6	0	1	0	0	2	5	5	13w	4	5	13w	5	6	0	3	1	1
Private High School	12	9	14	4	2	3	9	37	13w	11	36	13w	48	7	17	17	28	1
Academic Public High School	21	21	12	6	0	2	17	62	8w	14	60	10w	78	10	17	32	44	8
Vocational Public High School	29	28	20	3	3	14	34	59	12w	48	47	12w	72	37	40	39	9	7

SUB TOTAL NCTI	12	5	6	2	0	3	8	21	12w	9	19	11w	22	9	4	14	3	3
SUB TOTAL LTI	6	4	2	1	0	0	3	11	8w	4	10	10w	12	2	2	9	1	1
SUB TOTAL MPTI	2	3	3	1	0	2	3	10	5w	4	9	8w	8	4	2	4	2	1
TOTAL VTAE GRADUATES	20	12	11	4	0	5	14	42	9w	17	38	10w	42	15	8	27	6	4

SUB TOTAL ACADEMIC HIGH SCHOOL	33	30	26	10	2	5	26	99	10w	25	96	11w	126	17	34	49	72	9
SUB TOTAL CAPSTONE HIGH SCHOOL	29	28	20	3	3	14	34	59	12w	48	47	12w	72	37	40	39	9	7
TOTAL HIGH SCHOOL GRADUATES	62	58	46	13	5	19	60	158	11w	73	143	12w	198	54	74	88	81	16

TABLE 9 Continued
COST BENEFIT QUESTIONNAIRE RESULTS

	OO		PP		QQ	RR		SS		TT		
	Do you intend to get the training?		Do you own your house?		If you own a house its value is	Clubs		Length of Time Finding a Job		Unemployment		
	Yes	No	Yes	No		School	Social	Mos.	Wks.	Yes	No	Ave. Weeks
LTI Mechanical Design	3	0	0	3	–	0	3	0	0	0	6	–
LTI Graphic Arts	4	0	0	4	–	0	1	0	3	1	3	16
LTI Auto Body Repair	2	0	1	1	$25,000	0	2	6	1	2	6	18
LTI Fashion Merchandising	2	1	0	5	–	0	2	1	2	4	6	3
MPTI Data Processing	2	1	0	6	–	1	2	2	0	4	2	4
MPTI Engine Technology	3	0	1	3	$34,000	1	2	3	1	0	8	–
MPTI Auto Body Repair	2	0	0	6	–	0	4	4	2	3	9	10
NCTI Electronics	17	1	2	18	$39,500	2	14	2	0	8	30	10
NCTI Clerk-Typist	4	0	1	10	$20,000	8	7	4	2	9	10	13
Private High School	45	0	1	54	?	15	34	2	0	20	73	13
Academic Public High School	73	3	2	91	$ 5,000	24	56	3	0	31	122	9
Vocational Public High School	66	5	3	108	$ 7,000	16	54	3	1	82	106	12

SUB TOTAL NCTI	21	1	3	28	$33,000	10	21	3	0	17	40	11
SUB TOTAL LTI	11	1	1	13	$25,000	0	8	1	3	7	21	9
SUB TOTAL MPTI	7	1	1	15	$34,000	2	8	3	1	7	19	7
TOTAL VTAE GRADUATES	39	3	5	56	$31,600	12	37	2	3	31	80	9

SUB TOTAL ACADEMIC HIGH SCHOOL	118	3	3	145	$ 5,000	39	89	2	0	51	195	11
SUB TOTAL CAPSTONE HIGH SCHOOL	66	5	3	108	$ 7,000	16	54	3	0	82	106	12
TOTAL HIGH SCHOOL GRADUATES	184	8	6	253	$ 6,200	55	143	2	3	133	201	12

The combined information from these three survey forms was used to make a comparison between a VTAE graduate and a high school graduate. Care was taken to insure that both groups supplied an adequate amount of similar information for comparisons to be conducted.

Information from Tables 8 and 9 was used to calculate Private Economic Costs and Benefits, Private Noneconomic Costs and Benefits, Social Noneconomic Costs and Benefits, and a portion of the Social Economic Costs and Benefits as used in this study.

Another source of information in determining Social Economic Costs and Benefits was the end-of-the-year expense records of the three participating districts. This information is given by predetermined Cost Centers set up at each district. These Cost Centers include such areas as Instruction (broken down by each individual program offered at the school), Instructional Services, Community Services (Field Services), Student Services, General Administration, Instructional Resources (Data Processing, Library, Media or Audiovisual, etc.), General Institutional Expense, Research, and Physical Plant. The dollars for each of these Cost Centers are allocated to the particular programs being evaluated according to actual usage of the money, by the percent of FTEs in the program, or by special surveys of usage. A sample listing of the Cost Centers and how the costs were allocated is presented in Table 10. The costs of the other full-time programs included in this study were determined by a similar breakdown, as is shown for Engine Technology in this Table.

The final area of economic information that was required was Fixed Assets, which includes buildings, land, and equipment. The information on the cost of the buildings and land is readily available; however, equipment costs are very difficult to determine. Therefore, it became necessary to estimate costs on a program basis. The estimate was based on the cost of equipment located in the classrooms or shops used by the program being evaluated. Other factors included in the estimate were the amount of time the equipment was being used by students in the program, and the depreciation of the equipment assuming a 10-year life span. In a similar fashion, building and land costs were depreciated assuming a 50-year life span.

Table 10

ENGINE TECHNOLOGY

OPERATIONAL COST

TYPE OF COST	AMOUNT	MEANS OF ALLOCATION
1. Main Office	877.72	FTE
2. Word Processing Center	585.84	Percent of Usage
3. Instructor Salary & Fringe	32,415.77	Actual Cost
4. Other Salaries, Supplies, Etc.	12,867.45	FTE
5. Instructional Services	818.40	FTE
6. General Education - Instructors included in Number 3 above	2,819.05	FTE
7. Academic Administration	5,771,09	FTE
8. Fringe Benefits	844.97	Percent of Usage
9. Data Processing	877.36	FTE
10. Library	4,003.06	Percent of Usage
11. Media Center	3,109.83	Percent of Usage
12. Duplicating Center	1,366.29	Percent of Usage
13. Student Services	2,288.12	FTE
14. Research	530.60	FTE
15. General Administration	3,407.76	FTE
16. General Institutional	2,078.59	FTE
17. Physical Plant	7,374.98	Percent of Usage
TOTAL	$82,036.88	

1975/76 Cost:

Per Graduate = $10,254.61 (8)

Per FTE = $2,838.65 (28.90)

Once all the required information had been gathered, the task became one of arranging the information in a manner conducive to Cost Benefit Analysis. This proved to be a tremendously important decision making process. Many factors are or can be included in a Cost Benefit Analysis Study. It was determined that the following factors would be included in the present study:

1) Private Economic Costs:
   Tuition (none)
   Fees
   Books
   Supplies
   Travel (14¢ per mile)
   Lodging (10 months)
   Foregone Earnings
   Interest on Loans (7%)

2) Private Economic Benefits:
   Public Assistance Payments
   Social Security
   Veteran's Administration Benefits
   Scholarships
   Unemployment Compensation
   Earnings While in School
   Increased Earnings (upon graduation)

3) Private Noneconomic Costs:
   Inconvenience of Mobility and Relocation Anxieties
   Less Leisure Time
   Missing of Family and Friends

4) Private Noneconomic Benefits:
   Job Satisfaction
   Employability (length of time finding a job)
   Social Involvement (voting)
   Community Involvement
   Social Activities While in School
   Vertical Mobility (promotions)
   Option of Entering Other Educational Programs
   Home Ownership

5) Social Economic Costs:
   Social Security Payments
   Veteran's Administration Benefits
   Public Assistance Payments
   Unemployment Payments
   School Facilities (50-year life span)
   School Equipment (10-year life span)
   Operational Cost of School

6) Social Economic Benefits:
   Lower Unemployment
   Taxes on School Earnings (23%)
   Additional Tax Revenue on the Increased Earnings of a VTAE Graduate
   Additional Productivity of Goods
   Interest on Loans (7%)

7) Social Noneconomic Costs:
   Foregone Productivity of a Student
   Displacing a Worker by a VTAE Graduate

8) Social Noneconomic Benefits:
   Better Citizen
   Participation in Social Organizations
   Graduates Remaining in Area of Training and Contributing to Its Economy
   Attitudes - Toward Oneself
   Attitudes - Toward Education
   Attitudes - Toward Employment
   Lower Unemployment

These eight groups - four of costs and four of benefits - were determined in the present study. The economic costs and the economic benefits were compared according to the four formulas presented in the previous section. These formulas were for calculating the Length of the Payback Period, the Rate of Return on the Investment, the Present Value of the Benefits, and the Cost Benefit Ratio.

The next section of this report presents the four areas of Costs - Private Economic Costs, Private Noneconomic Costs, Social Economic Costs, and Social Noneconomic Costs - and the four areas of Benefits - Private Economic Benefits, Private Noneconomic Benefits, Social Economic Benefits, and Social Noneconomic Benefits - for each of the programs included in this study. There also is a column which presents the Costs and Benefits of an average VTAE student. These Costs and Benefits are given in Tables 11 through 18.

In most cases, the source of the Cost or the Benefit is obvious and easy to understand. There is one exception, however, and that is the Social Economic Benefit of "lower unemployment". To calculate the "lower unemployment" Benefit, it is necessary to subtract the total number of weeks unemployed for the VTAE graduate from the total number of weeks unemployed for the high school graduate, and to multiply this difference by $90 (the estimated weekly Benefit of an unemployed high school graduate).

TABLE 11
PRIVATE ECONOMIC COSTS
1974-75 and 1975-76

Cost	LTI Mechanical Design	LTI Graphic Arts	LTI Fashion Merchandising	LTI Auto Body Repair	MPTI Auto Body Repair	MPTI Data Processing	MPTI Engine Technology	NCTI Electronics	NCTI Clerk-Typist	VTAE Graduate	High School Graduate
Tuition Fees Books Supplies	$ 285 year	$ 500 year	$ 300 year	$ 378 year	$ 373 year	$1,110 year	$ 600 year	$ 451 year	$ 246 year	$ 451 year	–
Travel 14 cents per mile	$1,239 year	$1,450 year	$ 784 year	$1,748 year	$1,490 year	$ 157 year	$1,490 year	$ 510 year	$ 674 year	$ 847 year	–
Lodging 10 months	$1,300 year	$ 200 year	$1,300 year	$1,000 year	$ 830 year	$1,060 year	$ 940 year	$ 900 year	$ 820 year	$ 950 year	–
Foregone Earnings While in School	$5,911 year	$5,911 year	$5,911 year	$5,911 year	$5,911 year	$5,911 year	$5,911 year	$5,911 year	$5,911 year	$5,911 year	–
Interest on Loans 7%	None	$ 105 year	$ 91 year	None	$ 53 year	None	$ 150 year	$ 55 year	$ 44 year	$ 75 year	–
Total Cost Per Year	$8,735	$8,166	$8,386	$9,037	$9,085	$8,238	$9,091	$7,827	$7,695	$8,234	–

TABLE 12
PRIVATE ECONOMIC BENEFITS
1974-75 and 1975-76

Benefit	LTI Mechanical Design	LTI Graphic Arts	LTI Fashion Merchandising	LTI Auto Body Repair	MPTI Auto Body Repair	MPTI Data Processing	MPTI Engine Technology	NCTI Electronics	NCTI Clerk-Typist	VTAE Graduate	High School Graduate
Public Assistance	–	–	–	–	–	$ 600 year	$ 600 year	$ 500 year	$1,200 year	$ 725 year	?
Social Security	–	–	–	–	$1,680 year	$2,260 year	–	$ 744 year	$2,366 year	$2,003 year	–
Veteran Benefits	–	–	–	–	–	$ 564 year	$4,800 year	$3,180 year	$ 684 year	$2,482 year	–
Scholarships	$ 250 year	–	$ 150 year	–	$ 250 year	$ 790 year	–	$ 864 year	$ 631 year	$ 630 year	–
Unemployment Compensation	–	–	–	–	?	–	$1,140 year	–	–	–	?
Student Earnings While in School	$1,783 year	$1,548 year	$ 700 year	$2,000 year	$3,976 year	$ 450 year	$2,700 year	$1,567 year	$ 878 year	$1,664 year	–
Total A (In School)	$2,033 year	$1,548 year	$ 850 year	$2,000 year	$5,906 year	$4,654 year	$9,240 year	$6,856 year	$5,759 year	$7,504 year	–
Increased Earnings Per Year After Graduation	$3,920 year	$2,489 year	$ 479 year	$3,839 year	$2,629 year	$ 709 year	$4,314 year	$2,827 year	$ 9 year	$2,277 year	–
Total B (After Graduation)	$3,920 year	$2,489 year	$ 479 year	$3,839 year	$2,629 year	$ 709 year	$4,314 year	$2,827 year	$ 9 year	$2,277 year	–

TABLE 13
PRIVATE NONECONOMIC COSTS
1974-75 and 1975-76

Cost	LTI Mechanical Design	LTI Graphic Arts	LTI Fashion Merchandising	LTI Auto Body Repair	MPTI Auto Body Repair	MPTI Data Processing	MPTI Engine Technology	NCTI Electronics	NCTI Clerk-Typist	VTAE Graduate	High School Graduate
Average Length of Time at One Job	NOT CALCULATED IN THIS STUDY										
Amount of Leisure Time - Determined by Hours Working Per Week	work 38 hours per week	work 45 hours per week	work 44 hours per week	work 46 hours per week	work 36 hours per week	work 32 hours per week	work 45 hours per week	work 45 hours per week	work 44 hours per week	work 41 hours per week	work 45 hours per week
Missing of Family and Friends Due to School Attendance	NOT CALCULATED IN THIS STUDY										

TABLE 14
PRIVATE NONECONOMIC BENEFITS
1974-75 and 1975-76

Benefits	LTI Mechanical Design	LTI Graphic Arts	LTI Fashion Merchandising	LTI Auto Body Repair	MPTI Auto Body Repair	MPTI Data Processing	MPTI Engine Technology	NCTI Electronics	NCTI Clerk-Typist	VATE Graduate	High School Graduate
Percent Satisfied with Their Job	100%	100%	100%	67%	50%	100%	75%	84%	78%	83%	82%
Length of Time Required to Find a Job After Graduation	0 weeks	3 weeks	6 weeks	25 weeks	19 weeks	8 weeks	13 weeks	8 weeks	19 weeks	11 weeks	12 weeks
Percent Voting in 1976 = Social Involvement	100%	100%	80%	50%	100%	67%	100%	79%	83%	84%	79%
Percent Who are a Member of an Organization = Community Involvement	100%	25%	40%	100%	67%	33%	50%	70%	54%	59%	51%
Social Activity of Students While in School	NOT CALCULATED IN THIS STUDY										
Length of Time Between Promotions = Vertical Mobility	NOT CALCULATED IN THIS STUDY										
Option of Entering other Educational Programs[7]	100%	100%	40%	100%	40%	67%	75%	85%	36%	68%	73%
Percent of Graduates who own a Home	0%	0%	0%	50%	0%	0%	25%	10%	9%	8% 31,600	2% 6,200
Percent of Graduates who are working in a permanent position	100%	67%	75%	100%	60%	50%	50%	53%	50%	59%	26%

[7] Percent of graduates who plan to continue their education.

TABLE 15
SOCIAL ECONOMIC COSTS
1974-75 and 1975-76

Cost	LTI Mechanical Design	LTI Graphic Arts	LTI Fashion Merchandising	LTI Auto Body Repair	MPTI Auto Body Repair	MPTI Data Processing	MPTI Engine Technology	NCTI Electronics	NCTI Clerk-Typist	VTAE Graduate	High School Graduate
Social Security	–	–	–	–	$1,680 year	$2,250 year	–	$ 744 year	$2,366 year	$2,003 year	–
Veteran's Benefits	–	–	–	–	–	$ 564 year	$4,800 year	$3,180 year	$ 684 year	$2,482 year	–
Public Assist. Payments	–	–	–	–	–	$ 600 year	$ 600 year	$ 500 year	$1,200 year	$ 725 year	?
Unemployment Compensation	–	–	–	–	?	–	$1,140 year	–	–	–	?
Total A	$ 0 year	$ 0 year	$ 0 year	$ 0 year	$1,680 year	$3,414 year	$6,540 year	$4,424 year	$4,250 year	$5,210 year	–
Cost of Facilities[8]	$ 126 year	$ 142 year	$ 129 year	$ 154 year	$ 137 year	$ 101 year	$ 114 year	$ 216 year	$ 113 year	$ 137 year	–
Cost of Equipment[8]	$ 173 year	$ 165 year	$ 115 year	$ 231 year	$ 128 year	$ 178 year	$1,484 year	$ 460 year	$ 113 year	$ 341 year	–
Operational Cost of the School 1974-75[8]	$1,549	–	$2,092	–	–	–	$3,227	$2,707	–	$2,394	–
Operational Cost of the School 1975-76[8]	$1,487	$2,789	$1,347	$1,998	$2,216	$2,508	$2,839	$3,057	$2,727	$2,330	–
Total B	$3,335	$3,096	$3,683	$2,383	$2,481	$2,787	$7,664	$6,460	$2,953	$5,202	–

[8] Costs are broken down to reflect the program cost per FTE student.

TABLE 16
SOCIAL ECONOMIC BENEFITS
1974-75 and 1975-76

Benefits	LTI Mechanical Design	LTI Graphic Arts	LTI Fashion Merchandising	LTI Auto Body Repair	MPTI Auto Body Repair	MPTI Data Processing	MPTI Engine Technology	NCTI Electronics	NCTI Clerk-Typist	VTAE Graduate	High School Graduate
Taxes on School Earnings 23%	$ 410 year	$ 356 year	$ 161 year	$ 460 year	$ 914 year	$ 104 year	$ 621 year	$ 360 year	$ 202 year	$ 383 year	–
Total A (in School)	$ 410	$ 356	$ 161	$ 460	$ 914	$ 104	$ 621	$ 360	$ 202	$ 383	–
Amount of Savings Due to Lower Unemployment[9]	$1,035	$ 315	$ 765	$–585	$ 135	$ 675	$1,035	$ 171	None	$ 180	–
Additional Tax Revenue from the Increased Earnings of a VTAE Graduate	$ 902	$ 573	$ 110	$ 883	$ 606	$ 163	$ 992	$ 650	$ 2	$ 524	–
Additional Productivity of goods[10]	$3,920	$2,489	$ 479	$3,839	$2,629	$ 709	$4,314	$2,827	$ 9	$2,277	–
Interest From Students Loans 7%	None	$ 105 year	$ 91 year	None	$ 53 year	None	$ 150 year	$ 55 year	$ 4 year	$ 75 year	–
Total B (After Graduation)	$5,857	$3,482	$1,446	$4,137	$3,422	$1,547	$6,491	$3,703	$ 55	$3,056	–

[9] See page 59.

[10] Assumed additional productivity to be equal to increased earnings of a VTAE graduate, as a person is paid according to productivity in society.

TABLE 17
SOCIAL NONECONOMIC COSTS
1974-75 and 1975-76

Cost	LTI Mechanical Design	LTI Graphic Arts	LTI Fashion Merchandising	LTI Auto Body Repair	MPTI Auto Body Repair	MPTI Data Processing	MPTI Engine Technology	NCTI Electronics	NCTI Clerk-Typist	VTAE Graduate	High School Graduate
Foregone Productivity of a Student Due to School Attendance	NOT CALCULATED IN THIS STUDY										
Displacing a Worker by a VTAE Graduate[11]	17%	50%	100%	20%	67%	56%	0%	?	?	41%	–

[11] Shows the percent of job for which an employer would hire a high school graduate that are presently being held by a VTAE graduate.

TABLE 18
SOCIAL NONECONOMIC BENEFITS
1974-75 and 1975-76

Benefit		LTI Mechanical Design	LTI Graphic Arts	LTI Fashion Merchandising	LTI Auto Body Repair	MPTI Auto Body Repair	MPTI Data Processing	MPTI Engine Technology	NCTI Electronics	NCTI Clerk-Typist	VTAE Graduate	High School Graduate
Percent Voting in 1976 = better Citizenship		100%	100%	80%	50%	100%	67%	100%	79%	83%	84%	79%
Percent of Graduates who Belong to a Social Organization		100%	25%	40%	100%	67%	33%	50%	70%	54%	59%	51%
Percent and Number of Graduates Remaining in District and Contributing to its Economy		NOT CALCULATED IN THIS STUDY										
Attitude Toward Self		NOT CALCULATED IN THIS STUDY										
Attitude Toward Education												
Attitude Toward Employment												
Percent of Graduates Experiencing some Unemployment = Lower Unemployment Benefits	1975	0%	0%	40%	25%	17%	67%	0%	16%	50%	25%	28%
	1976	0%	50%	40%	25%	33%	67%	0%	26%	44%	31%	34%
VTAE Graduate's Preparation for His/Her Job[12]		2.3	1.3	2.7	1.8	2.7	2.0	2.0	–	–	2.0	?
Adjustment to Their Working Situation[12]		1.8	1.3	1.3	1.6	2.5	2.1	2.7	–	–	1.8	?
Increased Company's Productivity[12]		2.2	1.3	1.7	2.2	2.8	2.3	3.0	–	–	2.1	?
Has VTAE Graduate Improved your Company's Rate of Absenteeism		5 - yes 2 - no	8 - yes 0 - no	1 - yes 1 - no	5 - yes 0 - no	2 - yes 3 - no	5 - yes 3 - no	2 - yes 3 - no	–	–	27 - yes 11 - no	–

[12] Figure shown equals the rate of effectiveness of a VTAE graduate on a scale of 1 (good) to 5 (bad).

Finally, the Private Economic Costs are compared to the Private Economic Benefits, and the Social Economic Costs are compared to the Social Economic Benefits according to the formulas for Payback Period, for Rate of Return, for Present Value of Benefits, and for the Cost Benefit Ratio. In order to make these calculations, it is necessary to make some assumptions. The calculations for the Private and the Social Cost Benefit Analysis formulas are based on the following assumptions.

1) It is assumed that the benefits of a vocational-technical education exist on an equal yearly basis for ten years after the start of the program. It is concluded that at the end of the ten years, the benefits will have diminished to the point where they are the same for both a high school graduate with no additional education and for a VTAE graduate. Labor union effectiveness, on-the-job training programs, and rapidly changing technology all combine to reduce the benefits of a vocational-technical education by the end of this 10-year time span.

2) The interest rate used in the Cost Benefit Analysis Formulas is 7% per year. It is felt that this percentage rate adequately reflects the interest paid on other types of long-term investments.

3) Finally, it is assumed that building costs are depreciated on a straight-line basis for fifty (50) years and the yearly cost of facilities is allocated to each program according to the actual space used for the program.

   Similarly, it is assumed that equipment costs are depreciated on a straight-line basis for ten (10) years with the yearly cost being allocated to each program according to an estimation based on the cost of the equipment, its location, and the length of time it is being used by students in the program being evaluated.

The results of the calculations for Private Payback Period, Private Rate of Return, Private Present Value of Benefits, and Private Cost Benefit Ratio are presented in Table 19.

The results of the calculations for Social Payback Period, Social Rate of Return, Social Present Value of Benefits, and Social Cost Benefit Ratio are presented in Table 20.

The definitions of each of the four calculations for Private Cost Benefit Analysis and for Social Cost Benefit Analysis are restated at this point in order that the reader may clearly understand the meaning of the figures presented in the following two tables. The four techniques for comparing Costs to Benefits are defined as follows:

1. Present Value of Benefits Method: The present value of benefits are established by using a discount rate for all costs and benefits in order to reduce them to their present value. Once the present value has been established, costs are subtracted from benefits with the remainder being equal to the present value of the benefits of an educational program.

2. Cost Benefit Ratio Method: The Cost Benefit ratio is calculated by dividing the present value of the benefits by the present value of the costs. In all cases this ratio has to be larger than one (1) for the educational program to be beneficial.

3. Rate of Return Method: This method establishes the rate of interest that will make the present value of the benefits equal to the present value of the costs. It is calculated by determining what percent the costs have to be multiplied by in order to equal the benefits.

4. Payback Period Method: The payback period method is simply the length of time required to recoup the costs of an educational program. An individual will recoup the cost of the program through increased earnings, while society will recoup the cost of the program through various means - the most important being increased tax revenue.

The four formulas for calculating the above mentioned techniques are as follows:

1) Rate of Return

$$\sum_{T=0}^{N} \frac{B_T - C_T}{(1+r)^T} = 0$$

2) Present Value of Benefits

$$\sum_{T=0}^{N} \frac{B_T - C_T}{(1+i)^T}$$

3) Cost Benefit Ratio

$$\frac{\sum_{T=0}^{N} \frac{B_T}{(1+i)^T}}{\sum_{T=0}^{N} \frac{C_T}{(1+i)^T}}$$

4) Payback Period

$$\sum_{T=0}^{N} B_T - \sum_{T=0}^{N} C_T = 0$$

Legend

B = total benefits
C = total costs
N = number of years spanning the study
$\sum_{T=0}$
i = social discount rate (7%)
r = rate of return

TABLE 19
PRIVATE COST BENEFIT ANALYSIS

Private Returns	LTI Mechanical Design	LTI Graphic Arts	LTI Fashion Merchandising	LTI Auto Body Repair	MPTI Auto Body Repair	MPTI Data Processing	MPTI Engine Technology	NCTI Electronics	NCTI Clerk-Typist	VTAE Graduate
Payback Period	4.77 years	3.33 years	Over 10 years	2.48 years	1.38 years	5.41 years	3.59 years	2.90 years	Over 10 years	2.71 years
Rate of Return	29%	45%	Less Than 1%	70%	Over 75%	21%	65%	75%	Less Than 1%	62%
Present Value of Benefits	$1[illegible],176	$10,919	$-8,831	$19,192	$15,765	$1,732	$20,208	$15,026	$-1,052	$11,927
Cost-Benefit Ratio	$\frac{2.05}{1.00}$	$\frac{2.59}{1.00}$	$\frac{.34}{1.00}$	$\frac{3.78}{1.00}$	$\frac{3.25}{1.00}$	$\frac{.84}{1.00}$	$\frac{2.42}{1.00}$	$\frac{2.17}{1.00}$	$\frac{.84}{1.00}$	$\frac{2.19}{1.00}$

TABLE 20
SOCIAL COST BENEFIT ANALYSIS

Social Returns	LTI Mechanical Design	LTI Graphic Arts	LTI Fashion Merchandising	LTI Auto Body Repair	MPTI Auto Body Repair	MPTI Data Processing	MPTI Engine Technology	NCTI Electronics	NCTI Clerk-Typist	VTAE Graduate
Payback Period	2.48 years	1.79 years	4.49 years	1.47 years	1.95 years	4.94 years	3.77 years	5.59 years	Over 10 years	4.28 years
Rate of Return	Over 75%	Over 75%	36%	Over 75%	Over 75%	24%	47%	36%	Less Than 1%	46%
Present Value of Benefits	$33,337	$20,288	$5,567	$25,360	$19,421	$4,453	$28,799	$10,666	$-5,970	$11,626
Cost-Benefit Ratio	$\frac{11.12}{1.00}$	$\frac{8.01}{1.00}$	$\frac{2.66}{1.00}$	$\frac{12.30}{1.00}$	$\frac{5.99}{1.00}$	$\frac{1.79}{1.00}$	$\frac{3.54}{1.00}$	$\frac{1.84}{1.00}$	$\frac{.09}{1.00}$	$\frac{2.70}{1.00}$

The Economic Cost Benefit Analysis for both the student and for society, as presented in the previous two tables, does not include any representation of the noneconomic benefits and costs of a vocational-technical education. The noneconomic benefits and costs of a vocational-technical education will be treated extensively in future Cost Benefit Studies. However, it is necessary to briefly describe these noneconomic factors at this point and to mention that they should be included along with the economic factors to form a total picture of the benefits and costs of a vocational-technical education.

1) Displacement, Vacuum, or Multiplier Effects: In reply to the survey form sent to employers they stated that, regarding the jobs held by VTAE graduates, in 41% of the cases the VTAE graduate was displacing a high school graduate. On the other hand, 59% of the VTAE graduates were employed at a job that required the talents of a vocational-technical school graduate, one for which a high school graduate would not be qualified.

2) Improved Rate of Absenteeism: Employers of VTAE graduates were asked to state whether or not the graduates they hired improved their company's or business' rate of absenteeism. Twenty-seven employers stated that VTAE graduates did improve the rate of absenteeism, while ten stated that hiring a VTAE graduate had little effect on the rate of absenteeism.

3) Lower Unemployment: In 1976, 34% of the high school graduates responding to this Cost Benefit Study experienced some unemployment, while only 31% of the VTAE graduates responding to the Study experienced some unemployment. In 1975, the number of high school graduates experiencing some unemployment was 28%, and for the VTAE graduates it was 25%. Therefore, it can be concluded that VTAE graduates experience slightly less unemployment than do high school graduates.

4) Social Organizations: Vocational-technical graduates and high school graduates were asked to identify any social organization to which they belong. From this question, it was found that 59% of the VTAE graduates responding to the survey belonged to a social organization, and that 51% of the high school graduates belonged to a social organization. Therefore, slight difference exists between the two groups in their participation in social organizations.

5) Better Citizenship (Voting Participation): A comparison was made between the number of vocational-technical graduates who voted in 1976 and/or plan to vote in 1980 and the number of high school graduates who voted in 1976 and/or plan to vote in 1980. Among respondents to the survey, 84% of the VTAE graduates voted in 1976, compared to 79% of the high school graduates. Among high school graduates themselves, 84% of the academic high school graduates voted in 1976, compared to 74% of the vocational high school graduates.

   When asked whether or not they plan to vote in 1980, 100% of the VTAE graduates said yes, while only 95% of the high school graduates said yes.

6) Option of Entering Other Educational Programs: All persons have an option to continue their education in some form or another. If a person elects to exercise such an option, it will usually benefit the individual as well as society. On the survey of vocational-technical graduates, 68% indicated they plan to continue their education. An even higher 73% of the high school graduates plan to continue their education.

7) Amount of Leisure Time: In addition to VTAE graduates earning a higher salary than a high school graduate, they also earn their salary in less time and, therefore, have more leisure time in which to enjoy their earnings. The average VTAE graduate works 41 hours per week, while the average high school graduate works 45 hours per week.

8) Percent of Respondents Who Consider Their Job to Be a Permanent Position (Stability): It was found that over half of the VTAE graduates (59%) consider their present job to be permanent, while only 26% of the high school graduates consider their present job to be a permanent position. This same degree of stability was shown to exist by the employer response to the rate of absenteeism among VTAE graduates, as was expressed earlier in this discussion of Noneconomic Benefits and Costs.

9) Job Satisfaction: The final Noneconomic Benefit or Cost included in this study is job satisfaction. It was found that 83% of the VTAE graduates were satisfied with their present job, and that 82% of the high school graduates were satisfied with their present job. Therefore, a vocational-technical education has only a very slight effect on an employee's job satisfaction.

ADULT EDUCATION COURSES

In addition to determining the Costs and Benefits for a sample of full-time programs at Moraine Park Technical Institute, Lakeshore Technical Institute, and North Central Technical Institute, the Costs and Benefits of a sample of aidable, noncredit adult education courses were determined.

An attempt was made to choose twenty-five aidable adult education courses from each of the three participating schools. However, after the selection process was completed, twenty-five courses were identified at MPTI, twenty-two were identified at LTI, and sixteen were identified at NCTI. Therefore, a total sample of sixty-three aidable adult courses was included in this project.

In order to obtain information on the cost of these courses to the students themselves and to society in general, and on the benefits of the courses to the students and to society, a survey form was developed (See Appendix C-5). This survey form was mailed to several persons who completed one of the identified courses at either of the three VTAE schools. At least twelve persons were contacted for each course. In general, their response to the survey was very good, and the required information on Costs and Benefits was obtained.

As a supplement to the information obtained from the survey forms, information on the cost of offering adult education courses was obtained by reviewing school policies on tuition, supplies, instructor and supervisory salaries, and building or classroom rental. This information, combined with survey form results, forms the basis for the tables on the following pages.

Prior to the series of tables that identify the Costs and Benefits of the adult education courses is an index which identifies the courses and the school at which they are offered. The tables are in the same order as the courses are listed in the index. Tables 21 through 86 follow the index, and each table is a self-contained summary of Costs and Benefits to both the students who completed the course and to society in general.

As will be noticed by reviewing the tables, in most courses the Benefits outweigh the Costs. Most students feel that the course was well worth their time and money. Society is profited by having better prepared and more satisfied employees and citizens.

INDEX OF ADULT EDUCATION COURSES

A. Totals
All MPTI Courses -Table 21
All LTI Courses-Table 22
All NCTI Courses-Table 23

B. Agriculture

1.	Mushrooms	MPTI
2.	Animal Health Clinic	MPTI
3.	Beekeeping in Wisconsin	MPTI

C. Business

4.	Accounting, Fund. I	LTI
5.	Income Tax Helps	MPTI
6.	Personal Income Tax	NCTI
7.	Bookkeeping	MPTI
8.	Basic Bookkeeping	NCTI
9.	Supervisory Training	MPTI
10.	Trans. & Traffic Management	NCTI
11.	Labor Mgmt. Relations	NCTI
12.	Prof. Display Techniques	MPTI
13.	Checker, Cashier	NCTI
14.	Law & Administration	LTI
15.	Wills and Estate Planning	LTI
16.	Introduction to Investment	NCTI
17.	Beginning Typing	MPTI
18.	Typing	LTI
19.	Secretarial Skills	MPTI
20.	Key Punch	NCTI
21.	Shorthand Refresher	NCTI
22.	Office Machines	NCTI
23.	Basic Real Estate	MPTI
24.	Real Estate Principles	LTI
25.	Real Estate, Advanced	LTI

D. Home Economics

26.	General Sewing	MPTI
27.	Beginning Clothing	NCTI
28.	Clothing I	LTI
29.	Leisure Suits	LTI
30.	Drapery I	NCTI
31.	Sewing Quilts	MPTI
32.	Microwave Cooking	LTI
33.	Canning & Freezing	LTI
34.	Diet Delight	MPTI
35.	Meat Cutting	MPTI
36.	Interior Dec. I	NCTI
37.	Interior Decoration	LTI
38.	Prospective Parents	LTI
39.	Child Care Enrichment	MPTI

E. Trade & Technical

40.	Beg. Auto Mechanics	MPTI
41.	Auto Body Repair	MPTI
42.	Basic Electricity	MPTI
43.	Intro. to Electricity	LTI
44.	FCC Communications	NCTI
45.	Machine Shop	NCTI
46.	Tool Design I	LTI
47.	Blueprint Reading, Sheetmetal	LTI
48.	Plumbing Code & Theory	MPTI
49.	Beginning Welding	NCTI
50.	Advanced Welding	NCTI
51.	Welding, arc	LTI

F. Health & Safety

52.	Cosmetology Review	LTI
53.	Firearms Training	MPTI
54.	Rights of Age	MPTI
55.	Basic Life Support	MPTI
56.	Sign Language	LTI

G. General Education

57.	Creative Writing	MPTI
58.	Reading Acceleration	LTI
59.	Metric System	MPTI
60.	High School Chemistry	LTI
61.	First Aid	MPTI
62.	Driver Education	LTI
63.	Defensive Driving	LTI

TABLE 21

ALL MPTI COURSES

A. Number of Respondents: 227

B. Number of Respondents having taken previous courses: 149

C. Number of Respondents taking their first course: 76

D.

Employed:	160	Unemployed:	65
1. Full time	132	1. In school	9
2. Part time	30	2. Homemaker	49
		3. Looking for a job	10
		4. Other	11

E. Reasons for taking the course:

1. Related to my job	82
2. Personal information (not related to my job)	119
3. To update my skills	91
4. Retraining for my job	13
5. Training for another job	14
6. Other	26

F. Student:

AVE. COSTS		
1. Tuition and Materials:		$11.55
2. Travel Costs:		$12.14
3. Other (supplies, books, etc.):		$21.84
4. Loss of part-time job:	3%	
Lost Income:		?
5. Not satisfied with course:	9%	
6. Loss of one night per week:	5%	
TOTAL:		$25.09

AVE. BENEFITS		
1. Income gain:	7%	$154.38
2. Value of information learned in class:		$126.72
3. Employer paying for course:	18%	$ 1.87
4. Socializing:	45%	
5. Satisfied with course:	91%	
6. Increased satisfaction with their job:	47%	
7. A night out per week:	95%	
8. Updated or new job skills:	52%	
TOTAL:		$253.27

G. Social:

AVE. COSTS		
1. Instructor salary:		$153.23
2. Clerical cost:		$ 34.02
3. Supervisory salary:		$ 70.00
4. Building rental:		$ 61.25
5. Advertisement:		?
6. Decreased community involvement by students:	11%	
7. Not satisfied with course:	9%	
8. Lack of proper attendance:	?	
TOTAL:		$318.50

AVE. BENEFITS		
1. Tuition & material fees:		$174.64
2. Satisfied with course:	91%	
3. Increased satisfaction on the job:	47%	
4. Value of information learned in the course to the student:		$126.72
5. More knowledgeable society (personal information):	52%	
6. Retrained or updated employee skills:	52%	
TOTAL:		$301.36

H. The cost of this course was: 27 too high; 157 just right; 7 too low.

TABLE 22

ALL LTI COURSES

A. Number of Respondents: 171

B. Number of Respondents having taken previous courses: 90

C. Number of Respondents taking their first course: 81

D. Employed:	126	Unemployed:	45
1. Full time	95	1. In school	7
2. Part time	34	2. Homemaker	37
		3. Looking for a job	6
		4. Other	8

E. Reasons for taking the course:

1. Related to my job	57
2. Personal information (not related to my job)	93
3. To update my skills	52
4. Retraining for my job	5
5. Training for another job	14
6. Other	24

F. Student: AVE. COSTS			AVE. BENEFITS		
1. Tuition and Materials:		$21.44	1. Income gain:	9%	$139.94
2. Travel Costs:		$24.57	2. Value of information learned in class:		$101.83
3. Other (supplies, books, etc.):		$15.01	3. Employer paying for course:	9%	$ 39.84
4. Loss of part-time job:	2%		4. Socializing:	56%	
Lost Income:		?	5. Satisfied with course:	91%	
5. Not satisfied with course:	9%		6. Increased satisfaction with their job:	39%	
6. Loss of one night per week:	9%		7. A night out per week:	91%	
			8. Updated or new job skills:	42%	
TOTAL:		$44.15+	TOTAL:		$281.61

G. Social: AVE, COSTS			AVE. BENEFITS		
1. Instructor salary:		$151.85	1. Tuition & material fees:		$287.30
2. Clerical cost:		--	2. Satisfied with course:	91%	
3. Supervisory salary:		$ 30.00+	3. Increased satisfaction on the job:	39%	
4. Building rental:		$ 76.48	4. Value of information learned in the course to the student:		$101.83
5. Advertisement:		?	5. More knowledgeable society (personal information):	54%	
6. Decreased community involvement by students:	10%		6. Retrained or updated employee skills:	42%	
7. Not satisfied with course:	9%				
8. Lack of proper attendance:	?				
TOTAL:		$258.33+	TOTAL:		$389.13

H. The cost of this course was: 29 too high; 119 just right; 3 too low.

TABLE 23

ALL NCI COURSES

A. Number of Respondents: 195

B. Number of Respondents having taken previous courses: 108

C. Number of Respondents taking their first course: 87

D.

Employed:	146	Unemployed:	49
1. Full time	113	1. In school	8
2. Part time	34	2. Homemaker	36
		3. Looking for a job	13
		4. Other	10

E. Reasons for taking the course:

1. Related to my job	82
2. Personal information (not related to my job)	90
3. To update my skills	95
4. Retraining for my job	11
5. Training for another job	36
6. Other	19

F. Student:

AVE. COSTS		
1. Tuition and Materials:		$ 18.36
2. Travel Costs:		$ 20.75
3. Other (supplies, books, etc.):		$ 25.41
4. Loss of part-time job:	2%	
Lost Income:		$ .46
5. Not satisfied with course:	6%	
6. Loss of one night per week:	9%	
TOTAL:		$ 43.54

AVE. BENEFITS		
1. Income gain:	14%	$298.40
2. Value of information learned in class:		$ 59.95
3. Employer paying for course:	16%	$ 8.75
4. Socializing:	48%	—
5. Satisfied with course:	94%	—
6. Increased satisfaction with their job:	52%	—
7. A night out per week:	91%	—
8. Updated or new job skills:	73%	—
TOTAL:		$367.10

G. Social:

AVE. COSTS		
1. Instructor salary:		$276.87
2. Clerical cost:		--
3. Supervisory salary:		$ 40.00
4. Building rental:		$ 66.16
5. Advertisement:		?
6. Decreased community involvement by students:	17%	
7. Not satisfied with course:	6%	
8. Lack of proper attendance:	?	
TOTAL:		$383.03

AVE. BENEFITS		
1. Tuition & material fees:		$224.58
2. Satisfied with course:	94%	
3. Increased satisfaction on the job:	52%	
4. Value of information learned in the course to the student:		$ 59.95
5. More knowledgeable society (personal information):	46%	—
6. Retrained or updated employee skills:	73%	—
TOTAL:		$284.53

H. The cost of this course was: 18 too high; 150 just right; 4 too low.

TABLE 24

MUSHROOMS - MPTI

A. Number of Respondents: 12

B. Number of Respondents having taken previous courses: 6

C. Number of Respondents taking their first course: 6

D. Employed:	6	Unemployed:	6
1. Full time	3	1. In school	0
2. Part time	3	2. Homemaker	4
		3. Looking for a job	0
		4. Other	3

E. Reasons for taking the course:

1. Related to my job	1
2. Personal information (not related to my job)	11
3. To update my skills	3
4. Retraining for my job	0
5. Training for another job	0
6. Other	2

F. Student:

COSTS			BENEFITS		
1. Tuition and Materials:		$ 20.01	1. Income gain:	13%	?
2. Travel Costs:		$ 16.19	2. Value of information learned in class:		$ 42.45
3. Other (supplies, books, etc.):		$ 20.00	3. Employer paying for course:	10%	$ 2.00
4. Loss of part-time job:	0%		4. Socializing:	45%	
Lost Income:		--	5. Satisfied with course:	100%	
5. Not satisfied with course:	0%		6. Increased satisfaction with their job:	50%	
6. Loss of one night per week:	0%		7. A night out per week:	100%	
			8. Updated or new job skills:	25%	
TOTAL:		$ 29.9[illegible]	TOTAL:		$ 44.45+

G. Social:

COSTS			BENEFITS		
1. Instructor salary:		$128.80	1. Tuition & material fees:		$260.13
2. Clerical cost:		$ 29.25	2. Satisfied with course:	100%	
3. Supervisory salary:		$ 70.00	3. Increased satisfaction on the job:	50%	
4. Building rental:		$ 46.50	4. Value of information learned in the course to the student:		$ 42.45
5. Advertisement:		?	5. More knowledgeable society (personal information):	92%	
6. Decreased community involvement by students:	9%		6. Retrained or updated employee skills:	25%	
7. Not satisfied with course:	0%				
8. Lack of proper attendance:	?				
TOTAL:		$274.55	TOTAL:		$302.58

H. The cost of this course was: 0 too high; 10 just right; 0 too low.

TABLE 25

ANIMAL HEALTH CLINIC - MPTI

A. Number of Respondents: 8

B. Number of Respondents having taken previous courses: 3

C. Number of Respondents taking their first course: 5

D. Employed:	6	Unemployed:	2
1. Full time	6	1. In school	0
2. Part time	0	2. Homemaker	0
		3. Looking for a job	0
		4. Other	2

E. Reasons for taking the course:

1. Related to my job	8
2. Personal information (not related to my job)	0
3. To update my skills	6
4. Retraining for my job	0
5. Training for another job	0
6. Other	0

F. Student:

COSTS			BENEFITS		
1. Tuition and Materials:		$ 9.50	1. Income gain:	20%	?
2. Travel Costs:		$ 27.13	2. Value of information learned in class:		$175.00
3. Other (supplies, books, etc.):		--	3. Employer paying for course:	0%	--
4. Loss of part-time job:	0%		4. Socializing:	75%	
Lost Income:		--	5. Satisfied with course:	100%	
5. Not satisfied with course:	0%		6. Increased satisfaction with their job:	71%	
6. Loss of one night per week:	0%		7. A night out per week:	100%	
			8. Updated or new job skills:	75%	
TOTAL:		$ 27.58	TOTAL:		$175.00+

G. Social:

COSTS			BENEFITS		
1. Instructor salary:		$134.00	1. Tuition & material fees:		$142.50
2. Clerical cost:		$ 33.75	2. Satisfied with course:	100%	
3. Supervisory salary:		$ 70.00	3. Increased satisfaction on the job:	71%	
4. Building rental:		$100.00	4. Value of information learned in the course to the student:		$175.00
5. Advertisement:		?	5. More knowledgeable society (personal information):	0%	
6. Decreased community involvement by students:	25%		6. Retrained or updated employee skills:	75%	
7. Not satisfied with course:	0%				
8. Lack of proper attendance:	?				
TOTAL:		$337.75	TOTAL:		$317.50

H. The cost of this course was: 0 too high; 4 just right; 1 too low.

TABLE 26

BEEKEEPING IN WISCONSIN - MPTI

A. Number of Respondents: 4

B. Number of Respondents having taken previous courses: 2

C. Number of Respondents taking their first course: 2

D. Employed:	3		Unemployed:	0	
1. Full time		3	1. In school		0
2. Part time		0	2. Homemaker		0
			3. Looking for a job		0
			4. Other		0

E. Reasons for taking the course:

1. Related to my job	2
2. Personal information (not related to my job)	2
3. To update my skills	0
4. Retraining for my job	0
5. Training for another job	1
6. Other	0

F. Student:

COSTS			BENEFITS		
1. Tuition and Materials:		$ 11.66	1. Income gain:	0%	--
2. Travel Costs:		$ 18.75	2. Value of information learned in class:		$125.00
3. Other (supplies, books, etc.):		--	3. Employer paying for course:	0%	--
4. Loss of part-time job:	0%		4. Socializing:	67%	
Lost Income:		--	5. Satisfied with course:	100%	
5. Not satisfied with course:	0%		6. Increased satisfaction with their job:	50%	
6. Loss of one night per week:	0%		7. A night out per week:	100%	
			8. Updated or new job skills:	25%	
TOTAL:		$ 26.38	TOTAL:		$125.00

G. Social:

COSTS			BENEFITS		
1. Instructor salary:		$138.00	1. Tuition & material fees:		$151.58
2. Clerical cost:		$ 29.25	2. Satisfied with course:	100%	
3. Supervisory salary:		$ 70.00	3. Increased satisfaction on the job:	50%	
4. Building rental:		$ 50.00	4. Value of information learned in the course to the student:		$125.00
5. Advertisement:		?	5. More knowledgeable society (personal information):	50%	
6. Decreased community involvement by students:	0%		6. Retrained or updated employee skills:	25%	
7. Not satisfied with course:	0%				
8. Lack of proper attendance:	?				
TOTAL:		$266.50	TOTAL:		$276.58

H. The cost of this course was: 0 too high; 4 just right; 0 too low.

TABLE 27

ACCOUNTING FUNDAMENTALS I - LTI

A. Number of Respondents: 8

B. Number of Respondents having taken previous courses: 4

C. Number of Respondents taking their first course: 4

D. Employed: 5

1. Full time 4
2. Part time 1

Unemployed: 3

1. In school 1
2. Homemaker 2
3. Looking for a job 0
4. Other 0

E. Reasons for taking the course:

1. Related to my job 4
2. Personal information (not related to my job) 1
3. To update my skills 4
4. Retraining for my job 0
5. Training for another job 3
6. Other 0

F. Student:

COSTS		
1. Tuition and Materials:		$ 17.92
2. Travel Costs:		$ 8.98
3. Other (supplies, books, etc.):		--
4. Loss of part-time job:	0%	
Lost Income:		--
5. Not satisfied with course:	0%	
6. Loss of one night per week:	0%	
TOTAL:		$ 26.89

BENEFITS		
1. Income gain:	0%	--
2. Value of information learned in class:		$250.00
3. Employer paying for course:	0%	--
4. Socializing:	38%	
5. Satisfied with course:	100%	
6. Increased satisfaction with their job:	33%	
7. A night out per week:	100%	
8. Updated or new job skills:	88%	
TOTAL:		$250.00

G. Social:

COSTS		
1. Instructor salary:		$145.83
2. Clerical cost:		--
3. Supervisory salary:		$ 30.00+
4. Building rental:		$ 50.00
5. Advertisement:		?
6. Decreased community involvement by students:	0%	
7. Not satisfied with course:	0%	
8. Lack of proper attendance:	?	
TOTAL:		$225.83+

BENEFITS		
1. Tuition & material fees:		$218.62
2. Satisfied with course:	100%	
3. Increased satisfaction on the job:	33%	
4. Value of information learned in the course to the student:		$250.00
5. More knowledgeable society (personal information):	12%	
6. Retrained or updated employee skills:	88%	
TOTAL:		$468.62

H. The cost of this course was: 0 too high; 7 just right; 0 too low.

TABLE 28

INCOME TAX HELPS - MPTI

A. Number of Respondents: 13

B. Number of Respondents having taken previous courses: 10

C. Number of Respondents taking their first course: 3

D.			
Employed:	8	Unemployed:	5
1. Full time	7	1. In school	0
2. Part time	1	2. Homemaker	4
		3. Looking for a job	1
		4. Other	0

E. Reasons for taking the course:
1. Related to my job 1
2. Personal information (not related to my job) 12
3. To update my skills 4
4. Retraining for my job 0
5. Training for another job 0
6. Other 0

F. Student: COSTS			BENEFITS		
1. Tuition and Materials:		$ 8.86	1. Income gain:	0%	--
2. Travel Costs:		$ 6.57	2. Value of information learned in class:		$ 48.57
3. Other (supplies, books, etc.):		$ 1.00	3. Employer paying for course:	0%	--
4. Loss of part-time job:	0%		4. Socializing:	62%	
Lost Income:		--	5. Satisfied with course:	92%	
5. Not satisfied with course:	8%		6. Increased satisfaction with their job:	30%	
6. Loss of one night per week:	8%		7. A night out per week:	92%	
			8. Updated or new job skills:	31%	
TOTAL:		$ 12.87	TOTAL:		$ 48.57

G. Social: COSTS			BENEFITS		
1. Instructor salary:		$ 92.21	1. Tuition & material fees:		$116.95
2. Clerical cost:		$ 29.70	2. Satisfied with course:	92%	
3. Supervisory salary:		$ 70.00	3. Increased satisfaction on the job:	30%	
4. Building rental:		$ 30.00	4. Value of information learned in the course to the student:		$ 48.57
5. Advertisement:		?	5. More knowledgeable society (personal information):	92%	
6. Decreased community involvement by students:	15%		6. Retrained or updated employee skills:	31%	
7. Not satisfied with course:	8%				
8. Lack of proper attendance:	?				
TOTAL:		$221.91	TOTAL:		$165.52

H. The cost of this course was: 3 too high; 10 just right; 0 too low.

TABLE 29

PERSONAL INCOME TAX - NCTI

A. Number of Respondents: 10

B. Number of Respondents having taken previous courses: 7

C. Number of Respondents taking their first course: 3

D. Employed: 8
1. Full time 7
2. Part time 1

Unemployed: 2
1. In school 0
2. Homemaker 0
3. Looking for a job 1
4. Other 1

E. Reasons for taking the course:
1. Related to my job 4
2. Personal information (not related to my job) 6
3. To update my skills 4
4. Retraining for my job 0
5. Training for another job 0
6. Other 1

F. Student:

COSTS			BENEFITS		
1. Tuition and Materials:		$ 8.53	1. Income gain:	0%	--
2. Travel Costs:		$ 11.86	2. Value of information learned in class:		$ 39.40
3. Other (supplies, books, etc.):		$ 7.50	3. Employer paying for course:	10%	?
4. Loss of part-time job:	0%		4. Socializing:	67%	
Lost Income:		--	5. Satisfied with course:	70%	
5. Not satisfied with course:	30%		6. Increased satisfaction with their job:	40%	
6. Loss of one night per week:	0%		7. A night out per week:	100%	
			8. Updated or new job skills:	40%	
TOTAL:		$ 20.74	TOTAL:		$ 39.40+

G. Social:

COSTS			BENEFITS		
1. Instructor salary:		$141.75	1. Tuition & material fees:		$ 93.83
2. Clerical cost:		--	2. Satisfied with course:	70%	
3. Supervisory salary:		$ 40.00	3. Increased satisfaction on the job:	40%	
4. Building rental:		$ 30.00	4. Value of information learned in the course to the student:		$ 39.40
5. Advertisement:		?	5. More knowledgeable society (personal information):	60%	
6. Decreased community involvement by students:	0%		6. Retrained or updated employee skills:	40%	
7. Not satisfied with course:	30%				
8. Lack of proper attendance:	?				
TOTAL:		$211.75	TOTAL:		$133.23

H. The cost of this course was: 1 too high; 8 just right; 1 too low.

TABLE 30

BOOKKEEPING - MPTI

A. Number of Respondents: 6

B. Number of Respondents having taken previous courses: 4

C. Number of Respondents taking their first course: 2

D. Employed: 3
1. Full time 3
2. Part time 0

Unemployed: 3
1. In school 0
2. Homemaker 2
3. Looking for a job 1
4. Other 0

E. Reasons for taking the course:
1. Related to my job 2
2. Personal information (not related to my job) 3
3. To update my skills 1
4. Retraining for my job 1
5. Training for another job 1
6. Other 0

F. Student:

COSTS		
1. Tuition and Materials:		$ 11.86
2. Travel Costs:		$ 18.15
3. Other (supplies, books, etc.):		--
4. Loss of part-time job:	0%	
Lost Income:		--
5. Not satisfied with course:	33%	
6. Loss of one night per week:	0%	
TOTAL:		$ 30.01

BENEFITS		
1. Incom gain:	0%	--
2. Value of information learned in class:		$ 27.50
3. Employer paying for course:	17%	$ 3.13
4. Socializing:	33%	
5. Satisfied with course:	67%	
6. Increased satisfaction with their job:	33%	
7. A night out per week:	100%	
8. Updated or new job skills:	50%	
TOTAL:		$ 30.63

G. Social:

COSTS		
1. Instructor salary:		$132.05
2. Clerical cost:		$ 27.68
3. Supervisory salary:		$ 70.00
4. Building rental:		$ 46.50
5. Advertisement:		?
6. Decreased community involvement by students:	17%	
7. Not satisfied with course:	33%	
8. Lack of proper attendance:	?	
TOTAL:		$276.23

BENEFITS		
1. Tuition & material fees:		$145.88
2. Satisfied with course:	67%	
3. Increased satisfaction on the job:	33%	
4. Value of information learned in the course to the student:		$ 27.50
5. More knowledgeable society (personal information):	50%	
6. Retrained or updated employee skills:	50%	
TOTAL:		$173.38

H. The cost of this course was: 1 too high; 5 just right; 0 too low.

TABLE 31

BASIC BOOKKEEPING - NCTI

A. Number of Respondents: 19

B. Number of Respondents having taken previous courses: 9

C. Number of Respondents taking their first course: 10

D. Employed:	13	Unemployed:	6
1. Full time	7	1. In school	0
2. Part time	6	2. Homemaker	8
		3. Looking for a job	0
		4. Other	1

E. Reasons for taking the course:

1. Related to my job	7
2. Personal information (not related to my job)	7
3. To update my skills	14
4. Retraining for my job	1
5. Training for another job	2
6. Other	2

F. Student: COSTS			BENEFITS		
1. Tuition and Materials:		$ 15.17	1. Income gain:	9%	?
2. Travel Costs:		$ 8.35	2. Value of information learned in class:		$ 55.50
3. Other (supplies, books, etc.):		$ 10.75	3. Employer paying for course:	0%	--
4. Loss of part-time job:	0%		4. Socializing:	32%	
Lost Income:		--	5. Satisfied with course:	100%	
5. Not satisfied with course:	0%		6. Increased satisfaction with their job:	55%	
6. Loss of one night per week:	5%		7. A night out per week:	95%	
			8. Updated or new job skills:	89%	
TOTAL:		$ 24.85	TOTAL:		$ 55.50+

G. Social: COSTS			BENEFITS		
1. Instructor salary:		$217.60	1. Tuition & material fees:		$288.23
2. Clerical cost:		--	2. Satisfied with course:	100%	
3. Supervisory salary:		$ 40.00	3. Increased satisfaction on the job:	55%	
4. Building rental:		$ 67.50	4. Value of information learned in the course to the student:		$ 55.50
5. Advertisement:		?	5. More knowledgeable society (personal information):	37%	
6. Decreased community involvement by students:	16%		6. Retrained or updated employee skills:	89%	
7. Not satisfied with course:	0%				
8. Lack of proper attendance:	?				
TOTAL:		$325.10	TOTAL:		$343.73

H. The cost of this course was: 3 too high; 14 just right; 0 too low.

TABLE 32

SUPERVISORY TRAINING - MPTI

A. Number of Respondents: 10

B. Number of Respondents having taken previous courses: 7

C. Number of Respondents taking their first course: 2

D. Employed:	8	Unemployed:	1
1. Full time	8	1. In school	0
2. Part time	0	2. Homemaker	1
		3. Looking for a job	0
		4. Other	0

E. Reasons for taking the course:

1. Related to my job	4
2. Personal information (not related to my job)	1
3. To update my skills	6
4. Retraining for my job	0
5. Training for another job	0
6. Other	2

F. Student:

COSTS			BENEFITS		
1. Tuition and Materials:		?	1. Income gain:	11%	?
2. Travel Costs:		?	2. Value of information learned in class:		$81.25
3. Other (supplies, books, etc.):		?	3. Employer paying for course:	78%	$17.42
4. Loss of part-time job:	11%		4. Socializing:	63%	
Lost Income:		?	5. Satisfied with course:	100%	
5. Not satisfied with course:	0%		6. Increased satisfaction with their job:	78%	
6. Loss of one night per week:	11%		7. A night out per week:	89%	
			8. Updated or new job skills:	60%	
TOTAL:		$ 22.40+	TOTAL:		$98.67

G. Social:

COSTS			BENEFITS		
1. Instructor salary:		$154.29	1. Tuition & material fees:		$201.00
2. Clerical cost:		$ 45.23	2. Satisfied with course:	100%	
3. Supervisory salary:		$ 70.00	3. Increased satisfaction on the job:	78%	
4. Building rental:		$ 43.00	4. Value of information learned in the course to the student:		$ 81.25
5. Advertisement:		?	5. More knowledgeable society (personal information):	10%	
6. Decreased community involvement by students:	11%		6. Retrained or updated employee skills:	60%	
7. Not satisfied with course:	0%				
8. Lack of proper attendance:	?				
TOTAL:		$312.52	TOTAL:		$282.25

H. The cost of this course was: 1 too high; 4 just right; 0 too low.

TABLE 33

TRANSPORTATION & TRAFFIC MANAGEMENT - NCTI

A. Number of Respondents: 12

B. Number of Respondents having taken previous courses: 5

C. Number of Respondents taking their first course: 7

D. Employed: 12
1. Full time 12
2. Part time 0

Unemployed: 0
1. In school 1
2. Homemaker 0
3. Looking for a job 1
4. Other 1

E. Reasons for taking the course:

1. Related to my job	11
2. Personal information (not related to my job)	0
3. To update my skills	7
4. Retraining for my job	3
5. Training for another job	4
6. Other	0

F. Student:

COSTS		
1. Tuition and Materials:		$ 52.61
2. Travel Costs:		$ 99.00
3. Other (supplies, books, etc.):		$ 80.00
4. Loss of part-time job:	0%	
Lost Income:		--
5. Not satisfied with course:	0%	
6. Loss of one night per week:	8%	
TOTAL:		$170.87

BENEFITS		
1. Income gain:	33%	$178.20
2. Value of information learned in class:		$200.00
3. Employer paying for course:	92%	$ 52.14
4. Socializing:	27%	
5. Satisfied with course:	100%	
6. Increased satisfaction with their job:	83%	
7. A night out per week:	92%	
8. Updated or new job skills:	100%	
TOTAL:		$430.34

G. Social:

COSTS		
1. Instructor salary:		$284.38
2. Clerical cost:		--
3. Supervisory salary:		$ 40.00
4. Building rental:		$ 65.00
5. Advertisement:		?
6. Decreased community involvement by students:	42%	
7. Not satisfied with course:	0%	
8. Lack of proper attendance:	?	
TOTAL:		$389.38

BENEFITS		
1. Tuition & material fees:		$736.54
2. Satisfied with course:	100%	
3. Increased satisfaction on the job:	83%	
4. Value of information learned in the course to the student:		$200.00
5. More knowledgeable society (personal information):	0%	
6. Retrained or updated employee skills:	100%	
TOTAL:		$936.54

H. The cost of this course was: 0 too high; 7 just right; 1 too low.

TABLE 34
LABOR MANAGEMENT & RELATIONS - NCTI

A. Number of Respondents: 3

B. Number of Respondents having taken previous courses: 2

C. Number of Respondents taking their first course: 1

D. Employed: 3
1. Full time 3
2. Part time 0

Unemployed: 0
1. In school 0
2. Homemaker 0
3. Looking for a job 0
4. Other 0

E. Reasons for taking the course:
1. Related to my job 1
2. Personal information (not related to my job) 1
3. To update my skills 0
4. Retraining for my job 2
5. Training for another job 0
6. Other 1

F. Student: COSTS
1. Tuition and Materials. $ 4.30
2. Travel Costs: $ 17.50
3. Other (supplies, books, etc.): --
4. Loss of part-time job: 0%
   Lost Income: --
5. Not satisfied with course: 0%
6. Loss of one night per week: 0%

TOTAL: $ 21.80

BENEFITS
1. Income gain: 0% --
2. Value of information learned in class: ?
3. Employer paying for course: 0% --
4. Socializing: 67%
5. Satisfied with course: 100%
6. Increased satisfaction with their job: 67%
7. A night out per week: 100%
8. Updated or new job skills: 67%

TOTAL: ?

G. Social: COSTS
1. Instructor salary: $ 75.00
2. Clerical cost: --
3. Supervisory salary: $ 40.00
4. Building rental: $ 25.00
5. Advertisement: ?
6. Decreased community involvement by students: 33%
7. Not satisfied with course: 0%
8. Lack of proper attendance: ?

TOTAL: $140.00

BENEFITS
1. Tuition & material fees: $ 73.10
2. Satisfied with course: 100%
3. Increased satisfaction on the job: 67%
4. Value of information learned in the course to the student: ?
5. More knowledgeable society (personal information): 33%
6. Retrained or updated employee skills: 67%

TOTAL: $ 73.10+

H. The cost of this course was: 1 too high; 1 just right; 0 too low.

TABLE 35

PROFESSIONAL DISPLAY TECHNIQUES - MPTI

A. Number of Respondents: 2

B. Number of Respondents having taken previous courses: 0

C. Number of Respondents taking their first course: 2

D. Employed: 2
   1. Full time 2
   2. Part time 0

Unemployed: 0
   1. In school 0
   2. Homemaker 0
   3. Looking for a job 0
   4. Other 0

E. Reasons for taking the course:

1.	Related to my job	1
2.	Personal information (not related to my job)	0
3.	To update my skills	3
4.	Retraining for my job	0
5.	Training for another job	0
6.	Other	0

F. Student:

COSTS		
1. Tuition and Materials:		$ 4.05
2. Travel Costs:		?
3. Other (supplies, books, etc.):		--
4. Loss of part-time job:	0%	
Lost Income:		--
5. Not satisfied with course:	0%	
6. Loss of one night per week:	0%	
TOTAL:		$ 4.05+

BENEFITS		
1. Income gain:	50%	?
2. Value of information learned in class:		?
3. Employer paying for course:	50%	$ 2.03
4. Socializing:	100%	
5. Satisfied with course:	100%	
6. Increased satisfaction with their job:	100%	
7. A night out per week:	100%	
8. Updated or new job skills:	100%	
TOTAL:		$ 2.03+

G. Social:

COSTS		
1. Instructor salary:		$ 39.00
2. Clerical cost:		$ 63.00
3. Supervisory salary:		$ 70.00
4. Building rental:		$ 15.00
5. Advertisement:		?
6. Decreased community involvement by students:	0%	
7. Not satisfied with course:	0%	
8. Lack of proper attendance:	?	
TOTAL:		$187.00

BENEFITS		
1. Tuition & material fees:		$113.40
2. Satisfied with course:	100%	
3. Increased satisfaction on the job:	100%	
4. Value of information learned in the course to the student:		?
5. More knowledgeable society (personal information):	0%	
6. Retrained or updated employee skills:	100%	
TOTAL:		$113.40+

H. The cost of this course was: 0 too high; 1 just right; 0 too low.

TABLE 36

CHECKER-CASHIER - NCTI

A. Number of Respondents: 9

B. Number of Respondents having taken previous courses: 3

C. Number of Respondents taking their first course: 6

D. Employed: 5
1. Full time 1
2. Part time 4

Unemployed: 4
1. In school 2
2. Homemaker 1
3. Looking for a job 0
4. Other 1

E. Reasons for taking the course:
1. Related to my job 3
2. Personal information (not related to my job) 2
3. To update my skills 4
4. Retraining for my job 0
5. Training for another job 6
6. Other 2

F. Student:

COSTS
1. Tuition and Materials: $ 5.81
2. Travel Costs: $ 3.67
3. Other (supplies, books, etc.): $ 7.25
4. Loss of part-time job: 0%
   Lost Income: --
5. Not satisfied with course: 11%
6. Loss of one night per week: 11%

TOTAL: $ 10.07

BENEFITS
1. Income gain: 0% --
2. Value of information learned in class: $ 10.00
3. Employer paying for course: 0% --
4. Socializing: 67%
5. Satisfied with course: 89%
6. Increased satisfaction with their job: 29%
7. A night out per week: 89%
8. Updated or new job skills: 100%

TOTAL: $ 10.00

G. Social:

COSTS
1. Instructor salary: $140.23
2. Clerical cost: --
3. Supervisory salary: $ 40.00
4. Building rental: $ 30.00
5. Advertisement: ?
6. Decreased community involvement by students: 11%
7. Not satisfied with course: 11%
8. Lack of proper attendance: ?

TOTAL: $210.23

BENEFITS
1. Tuition & material fees: $ 69.72
2. Satisfied with course: 89%
3. Increased satisfaction on the job: 29%
4. Value of information learned in the course to the student: $ 10.00
5. More knowledgeable society (personal information): 22%
6. Retrained or updated employee skills: 100%

TOTAL: $ 79.72

H. The cost of this course was: 1 too high; 7 just right; 1 too low.

TABLE 37

LAW & ADMINISTRATION - LTI

A. Number of Respondents: 6

B. Number of Respondents having taken previous courses: 2

C. Number of Respondents taking their first course: 4

D.			
Employed:	6	Unemployed:	0
1. Full time	3	1. In school	0
2. Part time	3	2. Homemaker	1
		3. Looking for a job	0
		4. Other	0

E. Reasons for taking the course:	
1. Related to my job	5
2. Personal information (not related to my job)	0
3. To update my skills	2
4. Retraining for my job	0
5. Training for another job	1
6. Other	0

F. Student: COSTS			BENEFITS		
1. Tuition and Materials:		$ 17.15	1. Income gain:	33%	?
2. Travel Costs:		$ 20.90	2. Value of information learned in class:		$ 35.00
3. Other (supplies, books, etc.):		--	3. Employer paying for course:	20%	$ 4.00
4. Loss of part-time job:	0%		4. Socializing:	100%	
Lost Income:		--	5. Satisfied with course:	83%	
5. Not satisfied with course:	17%		6. Increased satisfaction with their job:	100%	
6. Loss of one night per week:	20%		7. A night out per week:	80%	
			8. Updated or new job skills:	50%	
TOTAL:		$ 33.87	TOTAL:		$ 39.00+

G. Social: COSTS			BENEFITS		
1. Instructor salary:		$296.00	1. Tuition & material fees:		$222.95
2. Clerical cost:		--	2. Satisfied with course:	83%	
3. Supervisory salary:		$ 30.00+	3. Increased satisfaction on the job:	100%	
4. Building rental:		$ 40.00	4. Value of information learned in the course to the student:		$ 35.00
5. Advertisement:		?	5. More knowledgeable society (personal information):	0%	
6. Decreased community involvement by students:	20%		6. Retrained or updated employee skills:	50%	
7. Not satisfied with course:	17%				
8. Lack of proper attendance:	?				
TOTAL:		$366.00+	TOTAL:		$257.95

H. The cost of this course was: 1 too high; 5 just right; 0 too low.

TABLE 38

WILLS & ESTATE PLANNING - LTI

A. Number of Respondents: 13

B. Number of Respondents having taken previous courses: 2

C. Number of Respondents taking their first course: 11

D. Employed:	9	Unemployed:	4
1. Full time	7	1. In school	0
2. Part time	2	2. Homemaker	1
		3. Looking for a job	0
		4. Other	3

E. Reasons for taking the course:

1. Related to my job	1
2. Personal information (not related to my job)	12
3. To update my skills	1
4. Retraining for my job	0
5. Training for another job	0
6. Other	0

F. Student: COSTS			BENEFITS		
1. Tuition and Materials:		$ 6.44	1. Income gain:	9%	?
2. Travel Costs:		$ 8.65	2. Value of information learned in class:		$ 20.00
3. Other (supplies, books, etc.):		--	3. Employer paying for course:	0%	--
4. Loss of part-time job:	0%		4. Socializing:	55%	
Lost Income:		--	5. Satisfied with course:	92%	
5. Not satisfied with course:	8%		6. Increased satisfaction with their job:	0%	
6. Loss of one night per week:	8%		7. A night out per week:	92%	
			8. Updated or new job skills:	8%	
TOTAL:		$ 15.17	TOTAL:		$ 20.00+

G. Social: COSTS			BENEFITS		
1. Instructor salary:		$ 67.50	1. Tuition & material fees:		$196.36
2. Clerical cost:		--	2. Satisfied with course:	92%	
3. Supervisory salary:		$ 30.00+	3. Increased satisfaction on the job:	0%	
4. Building rental:		$ 25.00	4. Value of information learned in the course to the student:		$ 20.00
5. Advertisement:		?	5. More knowledgeable society (personal information):	92%	
6. Decreased community involvement by students:	8%		6. Retrained or updated employee skills:	8%	
7. Not satisfied with course:	8%				
8. Lack of proper attendance:	?				
TOTAL:		$122.50+	TOTAL:		$216.36

H. The cost of this course was: 2 too high; 10 just right; 1 too low.

TABLE 39

INTRODUCTION TO INVESTMENT - NCTI

A. Number of Respondents: 7

B. Number of Respondents having taken previous courses: 3

C. Number of Respondents taking their first course: 4

D. Employed:	6	Unemployed:	1
1. Full time	6	1. In school	0
2. Part time	0	2. Homemaker	1
		3. Looking for a job	0
		4. Other	0

E. Reasons for taking the course:

1. Related to my job	4
2. Personal information (not related to my job)	6
3. To update my skills	2
4. Retraining for my job	0
5. Training for another job	0
6. Other	0

F. Student: COSTS			BENEFITS		
1. Tuition and Materials:		$ 8.22	1. Income gain:	0%	--
2. Travel Costs:		$ 23.70	2. Value of information learned in class:		?
3. Other (supplies, books, etc.):		$ 3.00	3. Employer paying for course:	0%	--
4. Loss of part-time job:	0%		4. Socializing:	0%	
Lost Income:		--	5. Satisfied with course:	100%	
5. Not satisfied with course:	0%		6. Increased satisfaction with their job:	60%	
6. Loss of one night per week:	0%		7. A night out per week:	100%	
			8. Updated or new job skills:	29%	
TOTAL:		$ 33.22	TOTAL:		?

G. Social: COSTS			BENEFITS		
1. Instructor salary:		$125.00	1. Tuition & material fees:		$ 86.31
2. Clerical cost:		--	2. Satisfied with course:	100%	
3. Supervisory salary:		$ 40.00	3. Increased satisfaction on the job:	60%	
4. Building rental:		$ 40.00	4. Value of information learned in the course to the student:		?
5. Advertisement:		?	5. More knowledgeable society (personal information):	86%	
6. Decreased community involvement by students:	43%		6. Retrained or updated employee skills:	29%	
7. Not satisfied with course:	0%				
8. Lack of proper attendance:	?				
TOTAL:		$205.00	TOTAL:		$ 86.31+

H. The cost of this course was: 0 too high; 4 just right; 0 too low.

TABLE 40
BEGINNING TYPING - MPTI

A. Number of Respondents: 10

B. Number of Respondents having taken previous courses: 6

C. Number of Respondents taking their first course: 4

D. Employed:	6	Unemployed:	4
1. Full time	4	1. In school	1
2. Part time	2	2. Homemaker	4
		3. Looking for a job	0
		4. Other	0

E. Reasons for taking the course:

1. Related to my job	2
2. Personal information (not related to my job)	6
3. To update my skills	7
4. Retraining for my job	1
5. Training for another job	1
6. Other	3

F. Student: COSTS			BENEFITS		
1. Tuition and Materials:		$ 16.50	1. Income gain:	0%	--
2. Travel Costs:		$ 9.67	2. Value of information learned in class:		$ 19.50
3. Other (supplies, books, etc.):		$ 2.00	3. Employer paying for course:	13%	$ 2.00
4. Loss of part-time job:	0%		4. Socializing:	60%	
Lost Income:		--	5. Satisfied with course:	100%	
5. Not satisfied with course:	0%		6. Increased satisfaction with their job:	43%	
6. Loss of one night per week:	0%		7. A night out per week:	100%	
			8. Updated or new job skills:	90%	
TOTAL:		$ 18.56	TOTAL:		$ 21.50

G. Social: COSTS			BENEFITS		
1. Instructor salary:		$158.17	1. Tuition & material fees:		$198.00
2. Clerical cost:		$ 27.00	2. Satisfied with course:	100%	
3. Supervisory salary:		$ 70.00	3. Increased satisfaction on the job:	43%	
4. Building rental:		$100.00	4. Value of information learned in the course to the student:		$ 19.50
5. Advertisement:		?	5. More knowledgeable society (personal information):	60%	
6. Decreased community involvement by students:	10%		6. Retrained or updated employee skills:	90%	
7. Not satisfied with course:	0%				
8. Lack of proper attendance:	?				
TOTAL:		$355.17	TOTAL:		$217.50

H. The cost of this course was: 1 too high; 8 just right; 0 too low.

TABLE 41

TYPING - LTI

A. Number of Respondents: 10

B. Number of Respondents having taken previous courses: 6

C. Number of Respondents taking their first course: 4

D.				
Employed:	7		Unemployed:	3
1. Full time	5		1. In school	0
2. Part time	2		2. Homemaker	2
			3. Looking for a job	1
			4. Other	1

E. Reasons for taking the course:

1. Related to my job	3
2. Personal information (not related to my job)	5
3. To update my skills	5
4. Retraining for my job	0
5. Training for another job	1
6. Other	1

F. Student:

COSTS			BENEFITS		
1. Tuition and Materials:		$ 10.44	1. Income gain:	0%	--
2. Travel Costs:		$ 5.37	2. Value of information learned in class:		$ 30.00
3. Other (supplies, books, etc.):		--	3. Employer paying for course:	0%	--
4. Loss of part-time job:	0%		4. Socializing:	11%	
Lost Income:		--	5. Satisfied with course:	88%	
5. Not satisfied with course:	13%		6. Increased satisfaction with their job:	57%	
6. Loss of one night per week:	11%		7. A night out per week:	89%	
			8. Updated or new job skills:	60%	
TOTAL:		$ 14.95	TOTAL:		$ 30.00

G. Social:

COSTS			BENEFITS		
1. Instructor salary:		$153.33	1. Tuition & material fees:		$101.27
2. Clerical cost:		--	2. Satisfied with course:	88%	
3. Supervisory salary:		$ 30.00+	3. Increased satisfaction on the job:	57%	
4. Building rental:		$100.00	4. Value of information learned in the course to the student:		$ 30.00
5. Advertisement:		?	5. More knowledgeable society (personal information):	50%	
6. Decreased community involvement by students:	0%		6. Retrained or updated employee skills:	60%	
7. Not satisfied with course:	13%				
8. Lack of proper attendance:	?				
TOTAL:		$283.33+	TOTAL:		$131.27

H. The cost of this course was: 3 too high; 5 just right; 0 too low.

TABLE 42
SECRETARIAL SKILLS - MPTI

A. Number of Respondents: 11

B. Number of Respondents having taken previous courses: 8

C. Number of Respondents taking their first course: 3

D.

Employed:	10	Unemployed:	1
1. Full time	6	1. In school	0
2. Part time	4	2. Homemaker	1
		3. Looking for a job	1
		4. Other	1

E. Reasons for taking the course:

1. Related to my job	6
2. Personal information (not related to my job)	0
3. To update my skills	6
4. Retraining for my job	2
5. Training for another job	2
6. Other	1

F. Student:

COSTS			BENEFITS		
1. Tuition and Materials:		$ 11.71	1. Income gain:	20%	?
2. Travel Costs:		$ 26.20	2. Value of information learned in class:		$ 10.00
3. Other (supplies, books, etc.):		$ 8.00	3. Employer paying for course:	0%	--
4. Loss of part-time job:	0%		4. Socializing:	55%	
Lost Income:		--	5. Satisfied with course:	80%	
5. Not satisfied with course:	20%		6. Increased satisfaction with their job:	75%	
6. Loss of one night per week:	10%		7. A night out per week:	90%	
			8. Updated or new job skills:	91%	
TOTAL:		$ 23.10	TOTAL:		$ 10.00+

G. Social:

COSTS			BENEFITS		
1. Instructor salary:		$151.02	1. Tuition & material fees:		$132.32
2. Clerical cost:		$ 25.43	2. Satisfied with course:	80%	
3. Supervisory salary:		$ 70.00	3. Increased satisfaction on the job:	75%	
4. Building rental:		$ 93.00	4. Value of information learned in the course to the student:		$ 10.00
5. Advertisement:		?	5. More knowledgeable society (personal information):	0%	
6. Decreased community involvement by students:	27%		6. Retrained or updated employee skills:	91%	
7. Not satisfied with course:	20%				
8. Lack of proper attendance:	?				
TOTAL:		$339.45	TOTAL:		$142.32

H. The cost of this course was: 4 too high; 5 just right; 0 too low.

TABLE 43
KEY PUNCH - NCTI

A. Number of Respondents: 4

B. Number of Respondents having taken previous courses: 0

C. Number of Respondents taking their first course: 4

D. Employed: 3
1. Full time 3
2. Part time 0

Unemployed: 1
1. In school 0
2. Homemaker 1
3. Looking for a job 0
4. Other 0

E. Reasons for taking the course:
1. Related to my job 0
2. Personal information (not related to my job) 1
3. To update my skills 2
4. Retraining for my job 0
5. Training for another job 2
6. Other 0

F. Student: COSTS
1. Tuition and Materials: $ 8.90
2. Travel Costs: $ 4.00
3. Other (supplies, books, etc.): --
4. Loss of part-time job: 0%
   Lost Income: --
5. Not satisfied with course: 0%
6. Loss of one night per week: 25%

TOTAL: $ 10.90

BENEFITS
1. Income gain: 50% $432.00
2. Value of information learned in class: $ 8.00
3. Employer paying for course: 25% $ 2.73
4. Socializing: 67%
5. Satisfied with course: 100%
6. Increased satisfaction with their job: 33%
7. A night out per week: 75%
8. Updated or new job skills: 100%

TOTAL: $442.73

G. Social: COSTS
1. Instructor salary: $346.50
2. Clerical cost: --
3. Supervisory salary: $ 40.00
4. Building rental: $ 72.00
5. Advertisement: ?
6. Decreased community involvement by students: 0%
7. Not satisfied with course: 0%
8. Lack of proper attendance: ?

TOTAL: $458.50

BENEFITS
1. Tuition & material fees: $ 53.40
2. Satisfied with course: 100%
3. Increased satisfaction on the job: 33%
4. Value of information learned in the course to the student: $ 8.00
5. More knowledgeable society (personal information): 25%
6. Retrained or updated employee skills: 100%

TOTAL: $ 61.40

H. The cost of this course was: 1 too high; 3 just right; 0 too low.

TABLE 44
SHORTHAND REFRESHER - NCTI

A. Number of Respondents: 8

B. Number of Respondents having taken previous courses: 3

C. Number of Respondents taking their first course: 5

D. Employed: 8
1. Full time 8
2. Part time 0

Unemployed: 0
1. In school 0
2. Homemaker 0
3. Looking for a job 0
4. Other 0

E. Reasons for taking the course:
1. Related to my job 4
2. Personal information (not related to my job) 2
3. To update my skills 5
4. Retraining for my job 2
5. Training for another job 1
6. Other 3

F. Student:

COSTS		
1. Tuition and Materials:		$ 25.26
2. Travel Costs:		$ 6.86
3. Other (supplies, books, etc.):		--
4. Loss of part-time job:	0%	
Lost Income:		--
5. Not satisfied with course:	0%	
6. Loss of one night per week:	0%	
TOTAL:		$ 29.98

BENEFITS		
1. Income gain:	0%	--
2. Value of information learned in class:		$ 50.00
3. Employer paying for course:	0%	--
4. Socializing:	50%	
5. Satisfied with course:	100%	
6. increased satisfaction with their job:	71%	
7. A night out per week:	100%	
8. Updated or new job skills:	100%	
TOTAL:		$ 50.00

G. Social:

COSTS		
1. Instructor salary:		$245.00
2. Clerical cost:		--
3. Supervisory salary:		$ 40.00
4. Building rental:		$ 60.00
5. Advertisement:		?
6. Decreased community involvement by students:	38%	
7. Not satisfied with course:	0%	
8. Lack of proper attendance:	?	
TOTAL:		$345.00

BENEFITS		
1. Tuition & material fees:		$404.16
2. Satisfied with course:	100%	
3. Increased satisfaction on the job:	71%	
4. Value of information learned in the course to the student:		$ 50.00
5. More knowledgeable society (personal information):	25%	
6. Retrained or updated employee skills:	100%	
TOTAL:		$454.16

H. The cost of this course was: 0 too high; 6 just right; 1 too low.

TABLE 45

OFFICE MACHINES - NCTI

A. Number of Respondents: 6

B. Number of Respondents having taken previous courses: 2

C. Number of Respondents taking their first course: 4

D. Employed: 2

1. Full time	0
2. Part time	2

Unemployed: 4

1. In school	0
2. Homemaker	2
3. Looking for a job	2
4. Other	0

E. Reasons for taking the course:

1. Related to my job	2
2. Personal information (not related to my job)	1
3. To update my skills	4
4. Retraining for my job	0
5. Training for another job	3
6. Other	0

F. Student:

COSTS		
1. Tuition and Materials:		$ 10.03
2. Travel Costs:		$ 19.25
3. Other (supplies, books, etc.):		$ 40.00
4. Loss of part-time job:	0%	
Lost Income:		--
5. Not satisfied with course:	0%	
6. Loss of one night per week:	17%	
TOTAL:		$ 44.00

BENEFITS		
1. Income gain:	0%	--
2. Value of information learned in class:		$ 40.00
3. Employer paying for course:	0%	--
4. Socializing:	50%	
5. Satisfied with course:	100%	
6. Increased satisfaction with their job:	25%	
7. A night out per week:	83%	
8. Updated or new job skills:	100%	
TOTAL:		$ 40.00

G. Social:

COSTS		
1. Instructor salary:		$707.00
2. Clerical cost:		--
3. Supervisory salary:		$ 40.00
4. Building rental:		$120.00
5. Advertisement:		?
6. Decreased community involvement by students:	0%	
7. Not satisfied with course:	0%	
8. Lack of proper attendance:	?	
TOTAL:		$867.00

BENEFITS		
1. Tuition & material fees:		$130.39
2. Satisfied with course:	100%	
3. Increased satisfaction on the job:	25%	
4. Value of information learned in the course to the student:		$ 40.00
5. More knowledgeable society (personal information):	17%	
6. Retrained or updated employee skills:	100%	
TOTAL:		$170.39

H. The cost of this course was: 0 too high; 5 just right; 0 too low.

TABLE 46

BASIC REAL ESTATE - MPTI

A. Number of Respondents: 14

B. Number of Respondents having taken previous courses: 8

C. Number of Respondents taking their first course: 6

D.	Employed: 13			Unemployed: 1	
1.	Full time	9	1.	In school	0
2.	Part time	4	2.	Homemaker	1
			3.	Looking for a job	0
			4.	Other	0

E. Reasons for taking the course:

1.	Related to my job	1
2.	Personal information (not related to my job)	9
3.	To update my skills	0
4.	Retraining for my job	0
5.	Training for another job	5
6.	Other	0

F. Student:

	COSTS		
1.	Tuition and Materials:		$ 12.81
2.	Travel Costs:		$ 8.63
3.	Other (supplies, books, etc.):		$ 9.00
4.	Loss of part-time job:	0%	
	Lost Income:		--
5.	Not satisfied with course:	23%	
6.	Loss of one night per week:	7%	
	TOTAL:		$ 18.30

	BENEFITS		
1.	Income gain:	0%	--
2.	Value of information learned in class:		$ 11.25
3.	Employer paying for course:	0%	--
4.	Socializing:	15%	
5.	Satisfied with course:	77%	
6.	Increased satisfaction with their job:	25%	
7.	A night out per week:	93%	
8.	Updated or new job skills:	36%	
	TOTAL:		$ 11.25

G. Social:

	COSTS		
1.	Instructor salary:		$126.00
2.	Clerical cost:		$ 42.75
3.	Supervisory salary:		$ 70.00
4.	Building rental:		$ 46.50
5.	Advertisement:		?
6.	Decreased community involvement by students:	23%	
7.	Not satisfied with course:	23%	
8.	Lack of proper attendance:	?	
	TOTAL:		$285.25

	BENEFITS		
1.	Tuition & material fees:		$243.39
2.	Satisfied with course:	77%	
3.	Increased satisfaction on the job:	25%	
4.	Value of information learned in the course to the student:		$ 11.25
5.	More knowledgeable society (personal information):	64%	
6.	Retrained or updated employee skills:	36%	
	TOTAL:		$254.64

H. The cost of this course was: 3 too high; 9 just right; 0 too low.

TABLE 47

REAL ESTATE PRINCIPLES - LTI

A. Number of Respondents: 11

B. Number of Respondents having taken previous courses: 7

C. Number of Respondents taking their first course: 4

D. Employed: 8
  1. Full time 7
  2. Part time 1

Unemployed: 3
  1. In school 0
  2. Homemaker 1
  3. Looking for a job 2
  4. Other 0

E. Reasons for taking the course:
  1. Related to my job 2
  2. Personal information (not related to my job) 6
  3. To update my skills 0
  4. Retraining for my job 0
  5. Training for another job 3
  6. Other 3

F. Student:

COSTS		
1. Tuition and Materials:		$ 13.64
2. Travel Costs:		$ 31.06
3. Other (supplies, books, etc.):		$ 12.33
4. Loss of part-time job:	9%	
Lost Income:		$ .86
5. Not satisfied with course:	0%	
6. Loss of one night per week:	9%	
TOTAL:		$ 45.25

BENEFITS		
1. Income gain:	0%	--
2. Value of information learned in class:		$192.50
3. Employer paying for course:	0%	--
4. Socializing:	64%	
5. Satisfied with course:	100%	
6. Increased satisfaction with their job:	29%	
7. A night out per week:	91%	
8. Updated or new job skills:	27%	
TOTAL:		$192.50

G. Social:

COSTS		
1. Instructor salary:		$129.58
2. Clerical cost:		--
3. Supervisory salary:		$ 30.00+
4 Building rental:		$ 46.00
5. Advertisement:		?
6. Decreased community involvement by students:	27%	
7. Not satisfied with course:	0%	
8. Lack of proper attendance:	?	
TOTAL:		$205.58+

BENEFITS		
1. Tuition & material fees:		$227.79
2. Satisfied with course:	100%	
3. Increased satisfaction on the job:	29%	
4. Value of information learned in the course to the student:		$192.50
5. More knowledgeable society (personal information):	55%	
6. Retrained or updated employee skills:	27%	
TOTAL:		$420.29

H. The cost of this course was: 2 too high; 7 just right; 0 too low.

TABLE 48

REAL ESTATE, ADVANCED - LTI

A. Number of Respondents: 9

B. Number of Respondents having taken previous courses: 6

C. Number of Respondents taking their first course: 3

D. Employed: 9

1. Full time	8
2. Part time	1

Unemployed: 0

1. In school	0
2. Homemaker	1
3. Looking for a job	0
4. Other	0

E. Reasons for taking the course:

1. Related to my job	4
2. Personal information (not related to my job)	4
3. To update my skills	3
4. Retraining for my job	0
5. Training for another job	2
6. Other	0

F. Student:

COSTS		
1. Tuition and Materials:		$ 10.19
2. Travel Costs:		$ 12.38
3. Other (supplies, books, etc.):		$ 30.00
4. Loss of part-time job:	0%	
Lost Income:		--
5. Not satisfied with course:	22%	
6. Loss of one night per week:	0%	
TOTAL:		$ 26.12

BENEFITS		
1. Income gain:	0%	--
2. Value of information learned in class:		$ 46.67
3. Employer paying for course:	0%	--
4. Socializing:	33%	
5. Satisfied with course:	78%	
6. Increased satisfaction with their job:	43%	
7. A night out per week:	100%	
8. Updated or new job skills:	56%	
TOTAL:		$ 46.67

G. Social:

COSTS		
1. Instructor salary:		$111.00
2. Clerical cost:		--
3. Supervisory salary:		$ 30.00+
4. Building rental:		$ 43.50
5. Advertisement:		?
6. Decreased community involvement by students:	11%	
7. Not satisfied with course:	22%	
8. Lack of proper attendance:	?	
TOTAL:		$184.50+

BENEFITS		
1. Tuition & material fees:		$104.96
2. Satisfied with course:	78%	
3. Increased satisfaction on the job:	43%	
4. Value of information learned in the course to the student:		$ 46.67
5. More knowledgeable society (personal information):	44%	
6. Retrained or updated employee skills:	56%	
TOTAL:		$151.63

H. The cost of this course was: 2 too high; 5 just right; 1 too low.

TABLE 49

GENERAL SEWING - MPTI

A. Number of Respondents: 16

B. Number of Respondents having taken previous courses: 13

C. Number of Respondents taking their first course: 2

D. Employed:	7	Unemployed:	8
1. Full time	4	1. In school	2
2. Part time	3	2. Homemaker	7
		3. Looking for a job	1
		4. Other	0

E. Reasons for taking the course:	
1. Related to my job	0
2. Personal information (not related to my job)	15
3. To update my skills	11
4. Retraining for my job	0
5. Training for another job	0
6. Other	1

F. Student: COSTS			BENEFITS		
1. Tuition and Materials:		$ 18.35	1. Income gain:	8%	?
2. Travel Costs:		$ 6.11	2. Value of information learned in class:		$ 58.33
3. Other (supplies, books, etc.):		$ 26.00	3. Employer paying for course:	0%	--
4. Loss of part-time job:	7%		4. Socializing:	53%	
Lost Income:		?	5. Satisfied with course:	100%	
5. Not satisfied with course:	0%		6. Increased satisfaction with their job:	43%	
6. Loss of one night per week:	0%		7. A night out per week:	100%	
			8. Updated or new job skills:	69%	
TOTAL:		$ 26.95	TOTAL:		$ 58.33

G. Social: COSTS			BENEFITS		
1. Instructor salary:		$111.68	1. Tuition & material fees:		$172.49
2. Clerical cost:		$ 21.15	2. Satisfied with course:	100%	
3. Supervisory salary:		$ 70.00	3. Increased satisfaction on the job:	43%	
4. Building rental:		$ 79.00	4. Value of information learned in the course to the student:		$ 58.33
5. Advertisement:		?	5. More knowledgeable society (personal information):	94%	
6. Decreased community involvement by students:	7%		6. Retrained or updated employee skills:	69%	
7. Not satisfied with course:	0%				
8. Lack of proper attendance:	?				
TOTAL:		$281.83	TOTAL:		$230.82

H. The cost of this course was: 1 too high; 12 just right; 0 too low.

TABLE 50

BEGINNING CLOTHING - NCTI

A. Number of Respondents: 20

B. Number of Respondents having taken previous courses: 13

C. Number of Respondents taking their first course: 7

D. Employed:	11	Unemployed:	9
1. Full time	6	1. In school	1
2. Part time	5	2. Homemaker	8
		3. Looking for a job	0
		4. Other	1

E. Reasons for taking the course:	
1. Related to my job	1
2. Personal information (not related to my job)	18
3. To update my skills	9
4. Retraining for my job	0
5. Training for another job	0
6. Other	0

F. Student: COSTS			BENEFITS		
1. Tuition and Materials:		$ 16.51	1. Income gain:	8%	$100.00
2. Travel Costs:		$ 6.81	2. Value of information learned in class:		$ 17.50
3. Other (supplies, books, etc.):		$ 7.25	3. Employer paying for course:	0%	--
4. Loss of part-time job:	0%		4. Socializing:	55%	
Lost Income:		--	5. Satisfied with course:	95%	
5. Not satisfied with course:	5%		6. Increased satisfaction with their job:	0%	
6. Loss of one night per week:	10%		7. A night out per week:	90%	
			8. Updated or new job skills:	45%	
TOTAL:		$ 24.37	TOTAL:		$117.50

G. Social: COSTS			BENEFITS		
1. Instructor salary:		$150.00	1. Tuition & material fees:	--	$206.38
2. Clerical cost:		--	2. Satisfied with course:	95%	
3. Supervisory salary:		$ 40.00	3. Increased satisfaction on the job:	0%	
4. Building rental:		$ 48.00	4. Value of information learned in the course to the student:		$ 17.50
5. Advertisement:		?	5. More knowledgeable society (personal information):	90%	
6. Decreased community involvement by students:	25%		6. Retrained or updated employee skills:	45%	
7. Not satisfied with course:	5%				
8. Lack of proper attendance:	?				
TOTAL:		$238.00	TOTAL:		$223.88

H. The cost of this course was: 0 too high; 17 just right; 0 too low.

TABLE 51

CLOTHING I - LTI

A. Number of Respondents: 8

B. Number of Respondents having taken previous courses: 4

C. Number of Respondents taking their first course: 4

D. Employed:	7	Unemployed:	1
1. Full time	5	1. In school	0
2. Part time	4	2. Homemaker	1
		3. Looking for a job	0
		4. Other	0

E. Reasons for taking the course:	
1. Related to my job	1
2. Personal information (not related to my job)	5
3. To update my skills	4
4. Retraining for my job	0
5. Training for another job	0
6. Other	0

F. Student: COSTS			BENEFITS		
1. Tuition and Materials:		$ 22.00	1. Income gain:	0%	--
2. Travel Costs:		$ 4.00	2. Value of information learned in class:		$ 33.75
3. Other (supplies, books, etc.):		$ 10.00	3. Employer paying for course:	0%	--
4. Loss of part-time job:	0%		4. Socializing:	71%	
Lost Income:		--	5. Satisfied with course:	75%	
5. Not satisfied with course:	25%		6. Increased satisfaction with their job:	20%	
6. Loss of one night per week:	0%		7. A night out per week:	100%	
			8. Updated or new job skills:	50%	
TOTAL:		$ 24.71	TOTAL:		$ 33.75

G. Social: COSTS			BENEFITS		
1. Instructor salary:		$217.50	1. Tuition & material fees:		$292.60
2. Clerical cost:		--	2. Satisfied with course:	75%	
3. Supervisory salary:		$ 30.00+	3. Increased satisfaction on the job:	20%	
4. Building rental:		$100.00	4. Value of information learned in the course to the student:		$ 33.75
5. Advertisement:		?	5. More knowledgeable society (personal information):	63%	
6. Decreased community involvement by students:	0%		6. Retrained or updated employee skills:	50%	
7. Not satisfied with course:	25%				
8. Lack of proper attendance:	?				
TOTAL:		$347.50+	TOTAL:		$326.35

H. The cost of this course was: 3 too high; 3 just right; 0 too low.

TABLE 52

LEISURE SUITS - LTI

A. Number of Respondents: 5

B. Number of Respondents having taken previous courses: 5

C. Number of Respondents taking their first course: 0

D. Employed: 2

1. Full time	0
2. Part time	2

Unemployed: 3

1. In school	0
2. Homemaker	2
3. Looking for a job	0
4. Other	1

E. Reasons for taking the course:

1. Related to my job	0
2. Personal information (not related to my job)	4
3. To update my skills	1
4. Retraining for my job	0
5. Training for another job	0
6. Other	1

F. Student:

COSTS		
1. Tuition and Materials:		$ 7.00
2. Travel Costs:		$ 10.00
3. Other (supplies, books, etc.):		$ 20.00
4. Loss of part-time job:	0%	
Lost Income:		--
5. Not satisfied with course:	0%	
6. Loss of one night per week:	0%	
TOTAL:		$ 22.00

BENEFITS		
1. Income gain:	0%	--
2. Value of information learned in class:		$ 20.00
3. Employer paying for course:	0%	--
4. Socializing:	100%	
5. Satisfied with course:	100%	
6. Increased satisfaction with their job:	0%	
7. A night out per week:	100%	
8. Updated or new job skills:	20%	
TOTAL:		$ 20.00

G. Social:

COSTS		
1. Instructor salary:		$247.50
2. Clerical cost:		--
3. Supervisory salary:		$ 30.00+
4. Building rental:		$100.00
5. Advertisement:		?
6. Decreased community involvement by students:	20%	
7. Not satisfied with course:	0%	
8. Lack of proper attendance:	?	
TOTAL:		$377.50+

BENEFITS		
1. Tuition & material fees:		$ 98.00
2. Satisfied with course:	100%	
3. Increased satisfaction on the job:	0%	
4. Value of information learned in the course to the student:		$ 20.00
5. More knowledgeable society (personal information):	80%	
6. Retrained or updated employee skills:	20%	
TOTAL:		$118.00

H. The cost of this course was: 0 too high; 5 just right; 0 too low.

TABLE 53

DRAPERY I - NCTI

A. Number of Respondents: 15

B. Number of Respondents having taken previous courses: 9

C. Number of Respondents taking their first course: 6

D. Employed:	7	Unemployed:	8
1. Full time	1	1. In school	0
2. Part time	6	2. Homemaker	10
		3. Looking for a job	0
		4. Other	1

E. Reasons for taking the course:	
1. Related to my job	4
2. Personal information (not related to my job)	12
3. To update my skills	9
4. Retraining for my job	1
5. Training for another job	0
6. Other	1

F. Student:

COSTS			BENEFITS		
1. Tuition and Materials:		$ 9.23	1. Income gain:	11%	?
2. Travel Costs:		$ 5.36	2. Value of information learned in class:		$ 70.00
3. Other (supplies, books, etc.):		$ 9.50	3. Employer paying for course:	10%	$ .48
4. Loss of part-time job:	8%		4. Socializing:	43%	
Lost Income:		$ .62	5. Satisfied with course:	100%	
5. Not satisfied with course:	0%		6. Increased satisfaction with their job:	56%	
6. Loss of one night per week:	8%		7. A night out per week:	92%	
			8. Updated or new job skills:	67%	
TOTAL:		$ 16.58	TOTAL:		$ 70.48+

G. Social:

COSTS			BENEFITS		
1. Instructor salary:		$180.00	1. Tuition & material fees:		$113.53
2. Clerical cost:		--	2. Satisfied with course:	100%	
3. Supervisory salary:		$ 40.00	3. Increased satisfaction on the job:	56%	
4. Building rental:		$ 48.00	4. Value of information learned in the course to the student:		$ 70.00
5. Advertisement:		?	5. More knowledgeable society (personal information):	80%	
6. Decreased community involvement by students:	13%		6. Retrained or updated employee skills:	67%	
7. Not satisfied with course:	0%				
8. Lack of proper attendance:	?				
TOTAL:		$268.00	TOTAL:		$183.53

H. The cost of this course was: 0 too high; 14 just right; 0 too low.

TABLE 54

SEWING QUILTS - MPTI

A. Number of Respondents: 12

B. Number of Respondents having taken previous courses: 11

C. Number of Respondents taking their first course: 1

D. Employed: 2
1. Full time 2
2. Part time 0

Unemployed: 10
1. In school 0
2. Homemaker 10
3. Looking for a job 1
4. Other 0

E. Reasons for taking the course:
1. Related to my job 2
2. Personal information (not related to my job) 8
3. To update my skills 4
4. Retraining for my job 0
5. Training for another job 0
6. Other 3

F. Student:

COSTS		
1. Tuition and Materials:		$ 8.83
2. Travel Costs:		$ 6.18
3. Other (supplies, books, etc.):		--
4. Loss of part-time job:	0%	
Lost Income:		--
5. Not satisfied with course:	0%	
6. Loss of one night per week:	9%	
TOTAL:		$ 12.87

BENEFITS		
1. Income gain:	0%	--
2. Value of information learned in class:		$ 276.67
3. Employer paying for course:	11%	$ .99
4. Socializing:	67%	
5. Satisfied with course:	100%	
6. Increased satisfaction with their job:	56%	
7. A night out per week:	91%	
8. Updated or new job skills:	33%	
TOTAL:		$277.66

G. Social:

COSTS		
1. Instructor salary:		$ 98.62
2. Clerical cost:		$ 25.88
3. Supervisory salary:		$ 70.00
4. Building rental:		$ 38.50
5. Advertisement:		?
6. Decreased community involvement by students:	9%	
7. Not satisfied with course:	0%	
8. Lack of proper attendance:	?	
TOTAL:		$233.00

BENEFITS		
1. Tuition & material fees:		$101.55
2. Satisfied with course:	100%	
3. Increased satisfaction on the job:	56%	
4. Value of information learned in the course to the student:		$276.67
5. More knowledgeable society (personal information):	67%	
6. Retrained or updated employee skills:	33%	
TOTAL:		$378.22

H. The cost of this course was: 1 too high; 9 just right; 1 too low.

TABLE 55

MICROWAVE COOKING - LTI

A. Number of Respondents: 17

B. Number of Respondents having taken previous courses: 8

C. Number of Respondents taking their first course: 9

D.

Employed:	11	Unemployed:	6
1. Full time	9	1. In school	2
2. Part time	2	2. Homemaker	6
		3. Looking for a job	0
		4. Other	0

E. Reasons for taking the course:

1. Related to my job	3
2. Personal information (not related to my job)	13
3. To update my skills	5
4. Retraining for my job	0
5. Training for another job	0
6. Other	1

F.

Student: COSTS			BENEFITS		
1. Tuition and Materials:		$ 8.25	1. Income gain:	0%	--
2. Travel Costs:		$ 10.36	2. Value of information learned in class:		$ 22.50
3. Other (supplies, books, etc.):		$ 9.00	3. Employer paying for course:	9%	$ 1.57
4. Loss of part-time job:	0%		4. Socializing:	59%	
Lost Income:		--	5. Satisfied with course:	94%	
5. Not satisfied with course:	6%		6. Increased satisfaction with their job:	25%	
6. Loss of one night per week:	0%		7. A night out per week:	100%	
			8. Updated or new job skills:	29%	
TOTAL:		$ 17.00	TOTAL:		$ 24.07

G.

Social: COSTS			BENEFITS		
1. Instructor salary:		$137.80	1. Tuition & material fees:		$117.98
2. Clerical cost:		--	2. Satisfied with course:	94%	
3. Supervisory salary:		$ 30.00+	3. Increased satisfaction on the job:	25%	
4. Building rental:		$ 50.00	4. Value of information learned in the course to the student:		$ 22.50
5. Advertisement:		?	5. More knowledgeable society (personal information):	76%	
6. Decreased community involvement by students:	12%		6. Retrained or updated employee skills:	29%	
7. Not satisfied with course:	6%				
8. Lack of proper attendance:	?				
TOTAL:		$217.80+	TOTAL:		$140.48

H. The cost of this course was: 4 too high; 11 just right; 0 too low.

TABLE 56

CANNING & FREEZING - LTI

A. Number of Respondents: 10

B. Number of Respondents having taken previous courses: 8

C. Number of Respondents taking their first course: 2

D. Employed: 5
1. Full time 4
2. Part time 1

Unemployed: 5
1. In school 0
2. Homemaker 5
3. Looking for a job 0
4. Other 0

E. Reasons for taking the course:
1. Related to my job 0
2. Personal information (not related to my job) 10
3. To update my skills 5
4. Retraining for my job 0
5. Training for another job 0
6. Other 0

F. Student:

COSTS			BENEFITS		
1. Tuition and Materials:		$ 8.11	1. Income gain:	0%	--
2. Travel Costs:		$ 2.80	2. Value of information learned in class:		?
3. Other (supplies, books, etc.):		$ 9.00	3. Employer paying for course:	0%	--
4. Loss of part-time job:	0%		4. Socializing:	90%	
Lost Income:		--	5. Satisfied with course:	100%	
5. Not satisfied with course:	0%		6. Increased satisfaction with their job:	0%	
6. Loss of one night per week:	0%		7. A night out per week:	100%	
			8. Updated or new job skills:	50%	
TOTAL:		$ 11.45	TOTAL:		?

G. Social:

COSTS			BENEFITS		
1. Instructor salary:		$138.75	1. Tuition & material fees:		$109.49
2. Clerical cost:		--	2. Satisfied with course:	100%	
3. Supervisory salary:		$ 30.00+	3. Increased satisfaction on the job:	0%	
4. Building rental:		$ 50.00	4. Value of information learned in the course to the student:		?
5. Advertisement:		?	5. More knowledgeable society (personal information):	100%	
6. Decreased community involvement by students:	0%		6. Retrained or updated employee skills:	50%	
7. Not satisfied with course:	0%				
8. Lack of proper attendance:	?				
TOTAL:		$218.75+	TOTAL:		$109.49+

H. The cost of this course was: 0 too high; 9 just right; 0 too low.

TABLE 57

DIET DELIGHT - MPTI

A. Number of Respondents: 10

B. Number of Respondents having taken previous courses: 7

C. Number of Respondents taking their first course: 3

D. Employed: 6
1. Full time 5
2. Part time 1

Unemployed: 3
1. In school 0
2. Homemaker 3
3. Looking for a job 0
4. Other 2

E. Reasons for taking the course:
1. Related to my job 0
2. Personal information (not related to my job) 7
3. To update my skills 0
4. Retraining for my job 0
5. Training for another job 0
6. Other 3

F. Student:

COSTS		
1. Tuition and Materials:		$ 6.38
2. Travel Costs:		$ 3.46
3. Other (supplies, books, etc.):		$ 2.88
4. Loss of part-time job:	0%	
Lost Income:		--
5. Not satisfied with course:	11%	
6. Loss of one night per week:	11%	
TOTAL:		$ 9.71

BENEFITS		
1. Income gain:	0%	--
2. Value of information learned in class:		$ 30.00
3. Employer paying for course:	0%	--
4. Socializing:	10%	
5. Satisfied with course:	89%	
6. Increased satisfaction with their job:	0%	
7. A night out per week:	89%	
8. Updated or new job skills:	0%	
TOTAL:		$ 30.00

G. Social:

COSTS		
1. Instructor salary:		$139.39
2. Clerical cost:		$ 54.00
3. Supervisory salary:		$ 70.00
4. Building rental:		$ 48.00
5. Advertisement:		?
6. Decreased community involvement by students:	0%	
7. Not satisfied with course:	11%	
8. Lack of proper attendance:	?	
TOTAL:		$311.39

BENEFITS		
1. Tuition & material fees:		$153.12
2. Satisfied with course:	89%	
3. Increased satisfaction on the job:	0%	
4. Value of information learned in the course to the student:		$ 30.00
5. More knowledgeable society (personal information):	100%	
6. Retrained or updated employee skills:	0%	
TOTAL:		$183.12

H. The cost of this course was: 0 too high; 9 just right; 0 too low.

TABLE 58

MEAT CUTTING - MPTI

A. Number of Respondents: 5

B. Number of Respondents having taken previous courses: 3

C. Number of Respondents taking their first course: 2

D. Employed:	4	Unemployed:	1
1. Full time	4	1. In school	0
2. Part time	0	2. Homemaker	1
		3. Looking for a job	0
		4. Other	0

E. Reasons for taking the course:

1. Related to my job	1
2. Personal information (not related to my job)	4
3. To update my skills	1
4. Retraining for my job	0
5. Training for another job	0
6. Other	1

F. Student:

COSTS		
1. Tuition and Materials:		$ 5.50
2. Travel Costs:		$ 3.33
3. Other (supplies, books, etc.):		--
4. Loss of part-time job:	0%	
Lost Income:		--
5. Not satisfied with course:	20%	
6. Loss of one night per week:	0%	
TOTAL:		$ 10.40

BENEFITS		
1. Income gain:	0%	--
2. Value of information learned in class:		$100.00
3. Employer paying for course:	0%	--
4. Socializing:	80%	
5. Satisfied with course:	80%	
6. Increased satisfaction with their job:	80%	
7. A night out per week:	100%	
8. Updated or new job skills:	20%	
TOTAL:		$100.00

G. Social:

COSTS		
1. Instructor salary:		$ 53.60
2. Clerical cost:		$ 24.30
3. Supervisory salary:		$ 70.00
4. Building rental:		$ 60.00
5. Advertisement:		?
6. Decreased community involvement by students:	0%	
7. Not satisfied with course:	20%	
8. Lack of proper attendance:	?	
TOTAL:		$ 207.90

BENEFITS		
1. Tuition & material fees:		$ 59.40
2. Satisfied with course:	80%	
3. Increased satisfaction on the job:	80%	
4. Value of information learned in the course to the student:		$100.00
5. More knowledgeable society (personal information):	80%	
6. Retrained or updated employee skills:	20%	
TOTAL:		$159.40

H. The cost of this course was: 1 too high; 4 just right; 0 too low.

TABLE 59

INTERIOR DECORATING - NCTI

A. Number of Respondents: 17

B. Number of Respondents having taken previous courses: 7

C. Number of Respondents taking their first course: 10

D. Employed:	13	Unemployed:	4
1. Full time	11	1. In school	1
2. Part time	2	2. Homemaker	4
		3. Looking for a job	0
		4. Other	0

E. Reasons for taking the course:

1. Related to my job	3
2. Personal information (not related to my job)	12
3. To update my skills	2
4. Retraining for my job	0
5. Training for another job	1
6. Other	1

F. Student: COSTS			BENEFITS		
1. Tuition and Materials:		$ 12.75	1. Income gain:	7%	$ 96.00
2. Travel Costs:		$ 13.31	2. Value of information learned in class:		$ 17.50
3. Other (supplies, books, etc.):		$ 20.20	3. Employer paying for course:	7%	?
4. Loss of part-time job:	0%		4. Socializing:	41%	
Lost Income:		--	5. Satisfied with course:	88%	
5. Not satisfied with course:	12%		6. Increased satisfaction with their job:	44%	
6. Loss of one night per week:	0%		7. A night out per week:	100%	
			8. Updated or new job skills:	18%	
TOTAL:		$ 30.55	TOTAL:		$113.50+

G. Social: COSTS			BENEFITS		
1. Instructor salary:		$157.50	1. Tuition & material fees:		$149.18
2. Clerical cost:		--	2. Satisfied with course:	88%	
3. Supervisory salary:		$ 40.00	3. Increased satisfaction on the job:	44%	
4. Building rental:		$ 40.00	4. Value of information learned in the course to the student:		$ 17.50
5. Advertisement:		?	5. More knowledgeable society (personal information):	71%	
6. Decreased community involvement by students:	13%		6. Retrained or updated employee skills:	18%	
7. Not satisfied with course:	12%				
8. Lack of proper attendance:	?				
TOTAL:		$237.50	TOTAL:		$166.68

H. The cost of this course was: 4 too high; 12 just right; 0 too low.

TABLE 60

INTERIOR DECORATING - LTI

A. Number of Respondents: 8

B. Number of Respondents having taken previous courses: 3

C. Number of Respondents taking their first course: 5

D. Employed:	6	Unemployed:	2
1. Full time	5	1. In school	0
2. Part time	1	2. Homemaker	2
		3. Looking for a job	0
		4. Other	0

E. Reasons for taking the course:

1. Related to my job	1
2. Personal information (not related to my job)	7
3. To update my skills	0
4. Retraining for my job	0
5. Training for another job	0
6. Other	2

F. Student: COSTS			BENEFITS		
1. Tuition and Materials:		$11.75	1. Income gain:	33%	?
2. Travel Costs:		$ 7.00	2. Value of information learned in class:		$ 40.00
3. Other (supplies, books, etc.):		--	3. Employer paying for course:	0%	--
4. Loss of part-time job:	0%		4. Socializing:	50%	
Lost Income:		--	5. Satisfied with course:	57%	
5. Not satisfied with course:	43%		6. Increased satisfaction with their job:	50%	
6. Loss of one night per week:	13%		7. A night out per week:	88%	
			8. Updated or new job skills:	0%	
TOTAL:		$ 18.40	TOTAL:		$ 40.00+

G. Social: COSTS			BENEFITS		
1. Instructor salary:		$217.50	1. Tuition & material fees:		$152.75
2. Clerical cost:		--	2. Satisfied with course:	57%	
3. Supervisory salary:		$ 30.00+	3. Increased satisfaction on the job:	50%	
4. Building rental:		$ 50.00	4. Value of information learned in the course to the student:		$ 40.00
5. Advertisement:		?	5. More knowledgeable society (personal information):	88%	
6. Decreased community involvement by students:	13%		6. Retrained or updated employee skills:	0%	
7. Not satisfied with course:	43%				
8. Lack of proper attendance:	?				
TOTAL:		$297.50+	TOTAL:		$192.75

H. The cost of this course was: 2 too high; 4 just right; 0 too low.

TABLE 61

PROSPECTIVE PARENTS - LTI

A. Number of Respondents: 16

B. Number of Respondents having taken previous courses: 5

C. Number of Respondents taking their first course: 11

D. Employed: 11
1. Full time 9
2. Part time 2

Unemployed: 5
1. In school 0
2. Homemaker 7
3. Looking for a job 0
4. Other 0

E. Reasons for taking the course:
1. Related to my job 0
2. Personal information (not related to my job) 15
3. To update my skills 0
4. Retraining for my job 0
5. Training for another job 1
6. Other 4

F. Student:

COSTS		
1. Tuition and Materials:		$ 11.83
2. Travel Costs:		$ 14.23
3. Other (supplies, books, etc.):		--
4. Loss of part-time job:	0%	--
Lost Income:		
5. Not satisfied with course:	0%	
6. Loss of one night per week:	6%	
TOTAL:		$ 25.23

BENEFITS		
1. Income gain:	0%	--
2. Value of information learned in class:		$500.00
3. Employer paying for course:	0%	--
4. Socializing:	88%	
5. Satisfied with course:	100%	
6. Increased satisfaction with their job:	7%	
7. A night out per week:	94%	
8. Updated or new job skills:	6%	
TOTAL:		$500.00

G. Social:

COSTS		
1. Instructor salary:		$ 87.00
2. Clerical cost:		--
3. Supervisory salary:		$ 30.00+
4. Building rental:		$ 30.00
5. Advertisement:		?
6. Decreased community involvement by students:	13%	
7. Not satisfied with course:	0%	
8. Lack of proper attendance:	?	
TOTAL:		$147.00+

BENEFITS		
1. Tuition & material fees:		$293.38
2. Satisfied with course:	100%	
3. Increased satisfaction on the job:	7%	
4. Value of information learned in the course to the student:		$500.00
5. More knowledgeable society (personal information):	94%	
6. Retrained or updated employee skills:	6%	
TOTAL:		$793.38

H. The cost of this course was: 5 too high; 9 just right; 1 too low.

TABLE 62

CHILD CARE - MPTI

A. Number of Respondents: 6

B. Number of Respondents having taken previous courses: 3

C. Number of Respondents taking their first course: 3

D. Employed: 3
1. Full time 3
2. Part time 0

Unemployed: 3
1. In school 1
2. Homemaker 2
3. Looking for a job 2
4. Other 0

E. Reasons for taking the course:

1. Related to my job	1
2. Personal information (not related to my job)	2
3. To update my skills	1
4. Retraining for my job	0
5. Training for another job	1
6. Other	1

F. Student:

COSTS		
1. Tuition and Materials:		$ 3.00
2. Travel Costs:		$ 16.00
3. Other (supplies, books, etc.):		$ 24.00
4. Loss of part-time job:	0%	
Lost Income:		--
5. Not satisfied with course:	50%	
6. Loss of one night per week:	0%	
TOTAL:		$ 25.00

BENEFITS		
1. Income gain:	17%	$163.20
2. Value of information learned in class:		$ 1.50
3. Employer paying for course:	33%	$ 6.33
4. Socializing:	67%	
5. Satisfied with course:	50%	
6. Increased satisfaction with their job:	25%	
7. A night out per week:	100%	
8. Updated or new job skills:	33%	
TOTAL:		$171.03

G. Social:

COSTS		
1. Instructor salary:		$113.85
2. Clerical cost:		$ 28.13
3. Supervisory salary:		$ 70.00
4. Building rental:		$ 75.00
5. Advertisement:		?
6. Decreased community involvement by students:	0%	
7. Not satisfied with course:	50%	
8. Lack of proper attendance:	?	
TOTAL:		$286.98

BENEFITS		
1. Tuition & material fees:		$ 37.50
2. Satisfied with course:	50%	
3. Increased satisfaction on the job:	25%	
4. Value of information learned in the course to the student:		$ 1.50
5. More knowledgeable society (personal information):	33%	
6. Retrained or updated employee skills:	33%	
TOTAL:		$ 39.00

H. The cost of this course was: 1 too high; 4 just right; 0 too low.

TABLE 63

AUTO MECHANICS - MPTI

A. Number of Respondents: 15

B. Number of Respondents having taken previous courses: 9

C. Number of Respondents taking their first course: 6

D. Employed:	10	Unemployed:	5
1. Full time	7	1. In school	4
2. Part time	3	2. Homemaker	2
		3. Looking for a job	1
		4. Other	1

E. Reasons for taking the course:	
1. Related to my job	1
2. Personal information (not related to my job)	12
3. To update my skills	2
4. Retraining for my job	0
5. Training for another job	0
6. Other	1

F. Student: COSTS			BENEFITS		
1. Tuition and Materials:		$ 9.29	1. Income gain:	0%	--
2. Travel Costs:		$ 7.49	2. Value of information learned in class:		$ 8.75
3. Other (supplies, books, etc.):		--	3. Employer paying for course:	0%	--
4. Loss of part-time job:	0%		4. Socializing:	43%	
Lost Income:		--	5. Satisfied with course:	79%	
5. Not satisfied with course:	21%		6. Increased satisfaction with their job:	20%	
6. Loss of one night per week:	7%		7. A night out per week:	93%	
			8. Updated or new job skills:	13%	
TOTAL:		$ 16.77	TOTAL:		$ 8.75

G. Social: COSTS			BENEFITS		
1. Instructor salary:		$162.84	1. Tuition & material fees:		$142.14
2. Clerical cost:		$ 34.43	2. Satisfied with course:	79%	
3. Supervisory salary:		$ 70.00	3. Increased satisfaction on the job:	20%	
4. Building rental:		$171.00	4. Value of information learned in the course to the student:		$ 8.75
5. Advertisement:		?	5. More knowledgeable society (personal information):	80%	
6. Decreased community involvement by students:	0%		6. Retrained or updated employee skills:	13%	
7. Not satisfied with course:	21%				
8. Lack of proper attendance:	?				
TOTAL:		$438.27	TOTAL:		$150.89

H. The cost of this course was: 3 too high; 10 just right; 0 too low.

TABLE 64

AUTO BODY REPAIR - MPTI

A. Number of Respondents: 3

B. Number of Respondents having taken previous courses: 2

C. Number of Respondents taking their first course: 1

D. Employed: 2

1. Full time	2
2. Part time	0

Unemployed: 1

1. In school	0
2. Homemaker	0
3. Looking for a job	0
4. Other	1

E. Reasons for taking the course:

1. Related to my job	3
2. Personal information (not related to my job)	1
3. To update my skills	1
4. Retraining for my job	0
5. Training for another job	0
6. Other	0

F. Student:

COSTS		
1. Tuition and Materials:		$ 18.00
2. Travel Costs:		$ 15.00
3. Other (supplies, books, etc.):		--
4. Loss of part-time job:	0%	
Lost Income:		--
5. Not satisfied with course:	0%	
6. Loss of one night per week:	0%	
TOTAL:		$ 33.00

BENEFITS		
1. Income gain:	0%	--
2. Value of information learned in class:		?
3. Employer paying for course:	0%	--
4. Socializing:	100%	
5. Satisfied with course:	100%	
6. Increased satisfaction with their job:	50%	
7. A night out per week:	100%	
8. Updated or new job skills:	33%	
TOTAL:		?

G. Social:

COSTS		
1. Instructor salary:		$248.40
2. Clerical cost:		$ 31.50
3. Supervisory salary:		$ 70.00
4. Building rental:		$180.00
5. Advertisement:		?
6. Decreased community involvement by students:	0%	
7. Not satisfied with course:	0%	
8. Lack of proper attendance:	?	
TOTAL:		$529.90

BENEFITS		
1. Tuition & material fees:		$252.00
2. Satisfied with course:	100%	
3. Increased satisfaction on the job:	50%	
4. Value of information learned in the course to the student:		?
5. More knowledgeable society (personal information):	33%	
6. Retrained or updated employee skills:	33%	
TOTAL:		$252.00+

H. The cost of this course was: 1 too high; 2 just right; 0 too low.

TABLE 65

BASIC ELECTRICITY - MPTI

A. Number of Respondents: 9

B. Number of Respondents having taken previous courses: 5

C. Number of Respondents taking their first course: 4

D. Employed: 9
1. Full time 9
2. Part time 0

Unemployed: 0
1. In school 0
2. Homemaker 0
3. Looking for a job 0
4. Other 0

E. Reasons for taking the course:

1. Related to my job	5
2. Personal information (not related to my job)	4
3. To update my skills	5
4. Retraining for my job	0
5. Training for another job	1
6. Other	1

F. Student:

COSTS		
1. Tuition and Materials:		$ 23.57
2. Travel Costs:		$ 12.25
3. Other (supplies, books, etc.):		$ 25.00
4. Loss of part-time job:	0%	
Lost Income:		--
5. Not satisfied with course:	11%	
6. Loss of one night per week:	0%	
TOTAL:		$ 37.64

BENEFITS		
1. Income gain:	33%	$504.90
2. Value of information learned in class:		$717.67
3. Employer paying for course:	38%	$ 9.00
4. Socializing:	63%	
5. Satisfied with course:	89%	
6. Increased satisfaction with their job:	44%	
7. A night out per week:	100%	
8. Updated or new job skills:	66%	
TOTAL:		$1,231.57

G. Social:

COSTS		
1. Instructor salary:		$195.00
2. Clerical cost:		$ 34.88
3. Supervisory salary:		$ 70.00
4. Building rental:		$180.00
5. Advertisement:		?
6. Decreased community involvement by students:	11%	
7. Not satisfied with course:	11%	
8. Lack of proper attendance:	?	
TOTAL:		$479.88

BENEFITS		
1. Tuition & material fees:		$365.34
2. Satisfied with course:	89%	
3. Increased satisfaction on the job:	44%	
4. Value of information learned in the course to the student:		$717.67
5. More knowledgeable society (personal information):	44%	
6. Retrained or updated employee skills:	66%	
TOTAL:		$1,083.01

H. The cost of this course was: 0 too high; 6 just right; 0 too low.

TABLE 66

INTRODUCTION TO ELECTRICITY - LTI

A. Number of Respondents: 9

B. Number of Respondents having taken previous courses: 7

C. Number of Respondents taking their first course: 2

D.	Employed:	9	Unemployed:	0
	1. Full time	9	1. In school	0
	2. Part time	0	2. Homemaker	0
			3. Looking for a job	0
			4. Other	0

E.	Reasons for taking the course:	
	1. Related to my job	7
	2. Personal information (not related to my job)	2
	3. To update my skills	6
	4. Retraining for my job	1
	5. Training for another job	1
	6. Other	0

F.	Student: COSTS			BENEFITS		
	1. Tuition and Materials:		$129.20	1. Income gain:	33%	$ 76.00
	2. Travel Costs:		$100.29	2. Value of information learned in class:		$ 30.00
	3. Other (supplies, books, etc.):		$ 4.50	3. Employer paying for course:	44%	$114.01
	4. Loss of part-time job:	0%		4. Socializing:	44%	
	Lost Income:		--	5. Satisfied with course:	89%	
	5. Not satisfied with course:	11%		6. Increased satisfaction with their job:	38%	
	6. Loss of one night per week:	11%		7. A night out per week:	89%	
				8. Updated or new job skills:	89%	
	TOTAL:		$217.51	TOTAL:		$220.01

G.	Social: COSTS			BENEFITS		
	1. Instructor salary:		$345.00	1. Tuition & material fees:		$1,744.20
	2. Clerical cost:		--	2. Satisfied with course:	89%	
	3. Supervisory salary:		$ 30.00	3. Increased satisfaction on the job:	38%	
	4. Building rental:		$150.00	4. Value of information learned in the course to the student:		$ 30.00
	5. Advertisement:		?	5. More knowledgeable society (personal information):	22%	
	6. Decreased community involvement by students:	13%		6. Retrained or updated employee skills:	89%	
	7. Not satisfied with course:	11%				
	8. Lack of proper attendance:	?				
	TOTAL:		$525.00	TOTAL:		$1,774.20

H. The cost of this course was: 2 too high; 6 just right; 0 too low.

TABLE 67

FCC COMMUNICATIONS - NCTI

A. Number of Respondents: 5

B. Number of Respondents having taken previous courses: 4

C. Number of Respondents taking their first course: 1

D. Employed: 5

1. Full time	4
2. Part time	1

Unemployed: 0

1. In school	1
2. Homemaker	0
3. Looking for a job	1
4. Other	0

E. Reasons for taking the course:

1. Related to my job	4
2. Personal information (not related to my job)	2
3. To update my skills	2
4. Retraining for my job	0
5. Training for another job	2
6. Other	1

F. Student:

COSTS		
1. Tuition and Materials:		$ 37.60
2. Travel Costs:		$ 22.75
3. Other (supplies, books, etc.):		$ 52.50
4. Loss of part-time job:	0%	
Lost Income:		--
5. Not satisfied with course:	0%	
6. Loss of one night per week:	0%	
TOTAL:		$ 73.80

BENEFITS		
1. Income gain:	0%	--
2. Value of information learned in class:		$155.00
3. Employer paying for course:	0%	--
4. Socializing:	60%	
5. Satisfied with course:	100%	
6. Increased satisfaction with their job:	20%	
7. A night out per week:	100%	
8. Updated or new job skills:	80%	
TOTAL:		$155.00

G. Social:

COSTS		
1. Instructor salary:		$244.38
2. Clerical cost:		--
3. Supervisory salary:		$ 40.00
4. Building rental:		$119.00
5. Advertisement:		?
6. Decreased community involvement by students:	20%	
7. Not satisfied with course:	0%	
8. Lack of proper attendance:	?	
TOTAL:		$403.38

BENEFITS		
1. Tuition & material fees:		$564.00
2. Satisfied with course:	100%	
3. Increased satisfaction on the job:	20%	
4. Value of information learned in the course to the student:		$155.00
5. More knowledgeable society (personal information):	40%	
6. Retrained or updated employee skills:	80%	
TOTAL:		$719.00

H. The cost of this course was: 0 too high; 5 just right; 0 too low.

TABLE 68

MACHINE SHOP - NCTI

A. Number of Respondents: 22

B. Number of Respondents having taken previous courses: 16

C. Number of Respondents taking their first course: 6

D. Employed: 18
  1. Full time 15
  2. Part time 3

Unemployed: 4
  1. In school 2
  2. Homemaker 1
  3. Looking for a job 1
  4. Other 1

E. Reasons for taking the course:

1. Related to my job	9
2. Personal information (not related to my job)	9
3. To update my skills	11
4. Retraining for my job	1
5. Training for another job	4
6. Other	5

F. Student:

COSTS		
1. Tuition and Materials:		$ 22.16
2. Travel Costs:		$ 23.45
3. Other (supplies, books, etc.):		$ 16.33
4. Loss of part-time job:	5%	
Lost Income:		$ 3.18
5. Not satisfied with course:	5%	
6. Loss of one night per week:	10%	
TOTAL:		$ 45.31

BENEFITS		
1. Income gain:	22%	$ 84.48
2. Value of information learned in class:		$ 47.50
3. Employer paying for course:	24%	$ 7.14
4. Socializing:	59%	
5. Satisfied with course:	95%	
6. Increased satisfaction with their job:	59%	
7. A night out per week:	90%	
8. Updated or new job skills:	73%	
TOTAL:		$139.12

G. Social:

COSTS		
1. Instructor salary:		$662.48
2. Clerical cost:		--
3. Supervisory salary:		$ 40.00
4. Building rental:		$ 98.00
5. Advertisement:		?
6. Decreased community involvement by students:	9%	
7. Not satisfied with course:	5%	
8. Lack of proper attendance:	?	
TOTAL:		$800.48

BENEFITS		
1. Tuition & material fees:		$210.52
2. Satisfied with course:	95%	
3. Increased satisfaction on the job:	59%	
4. Value of information learned in the course to the student:		$ 47.50
5. More knowledgeable society (personal information):	41%	
6. Retrained or updated employee skills:	73%	
TOTAL:		$258.02

H. The cost of this course was: 1 too high; 19 just right; 0 too low.

TABLE 69

TOOL DESIGN I - LTI

A. Number of Respondents: 1

B. Number of Respondents having taken previous courses: 1

C. Number of Respondents taking their first course: 0

D. Employed: 1
1. Full time 1
2. Part time 0

Unemployed: 0
1. In school 0
2. Homemaker 0
3. Looking for a job 0
4. Other 0

E. Reasons for taking the course:
1. Related to my job 1
2. Personal information (not related to my job) 0
3. To update my skills 1
4. Retraining for my job 0
5. Training for another job 0
6. Other 0

F. Student: COSTS
1. Tuition and Materials: $ 40.00
2. Travel Costs: $130.00
3. Other (supplies, books, etc.): --
4. Loss of part-time job: 0%
   Lost Income: --
5. Not satisfied with course: 0%
6. Loss of one night per week: 0%

TOTAL: $170.00

BENEFITS
1. Income gain: 100% $1,800.00
2. Value of information learned in class: ?
3. Employer paying for course: 100% $170.00
4. Socializing: 100%
5. Satisfied with course: 100%
6. Increased satisfaction with their job: 100%
7. A night out per week: 100%
8. Updated or new job skills: 100%

TOTAL: $1,970.00+

G. Social: COSTS
1. Instructor salary: $336.00
2. Clerical cost: --
3. Supervisory salary: $ 30.00+
4. Building rental: $210.00
5. Advertisement: ?
6. Decreased community involvement by students: 0%
7. Not satisfied with course: 0%
8. Lack of proper attendance: ?

TOTAL: $576.00+

BENEFITS
1. Tuition & material fees: $240.00
2. Satisfied with course: 100%
3. Increased satisfaction on the job: 100%
4. Value of information learned in the course to the student: ?
5. More knowledgeable society (personal information): 0%
6. Retrained or updated employee skills: 100%

TOTAL: $240.00+

H. The cost of this course was: 0 too high; 1 just right; 0 too low.

TABLE 70

BLUEPRINT READING - SHEETMETAL - LTI

A. Number of Respondents: 2

B. Number of Respondents having taken previous courses: 2

C. Number of Respondents taking their first course: 0

D. Employed: 2

1. Full time	2
2. Part time	0

Unemployed: 0

1. In school	0
2. Homemaker	0
3. Looking for a job	0
4. Other	0

E. Reasons for taking the course:

1. Related to my job	2
2. Personal information (not related to my job)	0
3. To update my skills	1
4. Retraining for my job	0
5. Training for another job	0
6. Other	0

F. Student:

COSTS		
1. Tuition and Materials:		$300.00
2. Travel Costs:		$1,000.00
3. Other (supplies, books, etc.):		--
4. Loss of part-time job:	0%	
Lost Income:		--
5. Not satisfied with course:	0%	
6. Loss of one night per week:	50%	
TOTAL:		$1,300.00

BENEFITS		
1. Income gain:	50%	$150.00
2. Value of information learned in class:		?
3. Employer paying for course:	100%	$1,300.00
4. Socializing:	0%	
5. Satisfied with course:	100%	
6. Increased satisfaction with their job:	50%	
7. A night out per week:	50%	
8. Updated or new job skills:	50%	
TOTAL:		$1,450.00+

G. Social:

COSTS		
1. Instructor salary:		$210.00
2. Clerical cost:		--
3. Supervisory salary:		$ 30.00+
4. Building rental:		$150.00
5. Advertisement:		?
6. Decreased community involvement by students:	50%	
7. Not satisfied with course:	0%	
8. Lack of proper attendance:	?	
TOTAL:		$390.00+

BENEFITS		
1. Tuition & material fees:		$3,900.00
2. Satisfied with course:	100%	
3. Increased satisfaction on the job:	50%	
4. Value of information learned in the course to the student:		?
5. More knowledgeable society (personal information):	0%	
6. Retrained or updated employee skills:	50%	
TOTAL:		$3,900.00+

H. The cost of this course was: 0 too high; 2 just right; 0 too low.

TABLE 71

PLUMBING CODE & THEORY - MPTI

A. Number of Respondents: 5

B. Number of Respondents having taken previous courses: 5

C. Number of Respondents taking their first course: 0

D. Employed: 5
  1. Full time 4
  2. Part time 1

Unemployed: 0
  1. In school 0
  2. Homemaker 0
  3. Looking for a job 0
  4. Other 0

E. Reasons for taking the course:
  1. Related to my job 5
  2. Personal information (not related to my job) 0
  3. To update my skills 1
  4. Retraining for my job 1
  5. Training for another job 0
  6. Other 0

F. Student: COSTS
  1. Tuition and Materials: $ 12.75
  2. Travel Costs: $ 14.00
  3. Other (supplies, books, etc.): --
  4. Loss of part-time job: 0%
     Lost Income: --
  5. Not satisfied with course: 0%
  6. Loss of one night per week: 0%

TOTAL: $ 23.25

BENEFITS
  1. Income gain: 0% --
  2. Value of information learned in class: ?
  3. Employer paying for course: 0% --
  4. Socializing: 50%
  5. Satisfied with course: 100%
  6. Increased satisfaction with their job: 100%
  7. A night out per week: 100%
  8. Updated or new job skills: 40%

TOTAL: ?

G. Social: COSTS
  1. Instructor salary: $142.00
  2. Clerical cost: $ 33.75
  3. Supervisory salary: $ 70.00
  4. Building rental: $ 50.00
  5. Advertisement: ?
  6. Decreased community involvement by students: 0%
  7. Not satisfied with course: 0%
  8. Lack of proper attendance: ?

TOTAL: $295.75

BENEFITS
  1. Tuition & material fees: $191.25
  2. Satisfied with course: 100%
  3. Increased satisfaction on the job: 100%
  4. Value of information learned in the course to the student: ?
  5. More knowledgeable society (personal information): 0%
  6. Retrained or updated employee skills: 40%

TOTAL: $191.25+

H. The cost of this course was: 1 too high; 4 just right; 0 too low.

TABLE 72

WELDING - NCTI

A. Number of Respondents: 28

B. Number of Respondents having taken previous courses: 16

C. Number of Respondents taking their first course: 12

D. Employed:	23	Unemployed:	5
1. Full time	21	1. In school	0
2. Part time	2	2. Homemaker	0
		3. Looking for a job	6
		4. Other	2

E. Reasons for taking the course:	
1. Related to my job	17
2. Personal information (not related to my job)	8
3. To update my skills	13
4. Retraining for my job	0
5. Training for another job	10
6. Other	2

F. Student: COSTS			BENEFITS		
1. Tuition and Materials:		$ 24.07	1. Income gain:	23%	$323.63
2. Travel Costs:		$ 28.96	2. Value of information learned in class:		$ 61.71
3. Other (supplies, books, etc.):		$ 9.70	3. Employer paying for course:	26%	$ 8.81
4. Loss of part-time job:	0%		4. Socializing:	46%	
Lost Income:		--	5. Satisfied with course:	89%	
5. Not satisfied with course:	11%		6. Increased satisfaction with their job:	54%	
6. Loss of one night per week:	15%		7. A night out per week:	85%	
			8. Updated or new job skills:	82%	
TOTAL:		$ 48.08	TOTAL:		$394.15

G. Social: COSTS			BENEFITS		
1. Instructor salary:		$469.56	1. Tuition & material fees:		$216.63
2. Clerical cost:		--	2. Satisfied with course:	89%	
3. Supervisory salary:		$ 40.00	3. Increased satisfaction on the job:	54%	
4. Building rental:		$112.00	4. Value of information learned in the course to the student:		$ 61.71
5. Advertisement:		?	5. More knowledgeable society (personal information):	29%	
6. Decreased community involvement by students:	14%		6. Retrained or updated employee skills:	82%	
7. Not satisfied with course:	11%				
8. Lack of proper attendance:	?				
TOTAL:		$621.56	TOTAL:		$278.34

H. The cost of this course was: 5 too high; 20 just right; 0 too low.

TABLE 73

ADVANCED WELDING - NCTI

A. Number of Respondents: 10

B. Number of Respondents having taken previous courses: 9

C. Number of Respondents taking their first course: 1

D. Employed: 9
1. Full time 8
2. Part time 2

Unemployed: 1
1. In school 0
2. Homemaker 0
3. Looking for a job 1
4. Other 1

E. Reasons for taking the course:
1. Related to my job 8
2. Personal information (not related to my job) 3
3. To update my skills 7
4. Retraining for my job 1
5. Training for another job 1
6. Other 0

F. Student: COSTS
1. Tuition and Materials: $ 35.78
2. Travel Costs: $ 38.23
3. Other (supplies, books, etc.): $ 66.33
4. Loss of part-time job: 10%
   Lost Income: $ 1.00
5. Not satisfied with course: 0%
6. Loss of one night per week: 20%

TOTAL: $ 88.89

BENEFITS
1. Income gain: 44% $105.60
2. Value of information learned in class: ?
3. Employer paying for course: 0% --
4. Socializing: 70%
5. Satisfied with course: 100%
6. Increased satisfaction with their job: 89%
7. A night out per week: 80%
8. Updated or new job skills: 90%

TOTAL: $105.60+

G. Social: COSTS
1. Instructor salary: $283.50
2. Clerical cost: --
3. Supervisory salary: $ 40.00
4. Building rental: $ 84.00
5. Advertisement: ?
6. Decreased community involvement by students: 10%
7. Not satisfied with course: 0%
8. Lack of proper attendance: ?

TOTAL: $407.50

BENEFITS
1. Tuition & material fees: $322.02
2. Satisfied with course: 100%
3. Increased satisfaction on the job: 89%
4. Value of information learned in the course to the student: ?
5. More knowledgeable society (personal information): 30%
6. Retrained or updated employee skills: 90%

TOTAL: $322.02+

H. The cost of this course was: 1 too high; 8 just right; 0 too low.

TABLE 74

ARC WELDING - LTI

A. Number of Respondents: 6

B. Number of Respondents having taken previous courses: 2

C. Number of Respondents taking their first course: 4

D. Employed:	5	Unemployed:	1
1. Full time	4	1. In school	1
2. Part time	1	2. Homemaker	0
		3. Looking for a job	0
		4. Other	0

E. Reasons for taking the course:

1. Related to my job	4
2. Personal information (not related to my job)	1
3. To update my skills	3
4. Retraining for my job	0
5. Training for another job	0
6. Other	1

F. Student:

COSTS			BENEFITS		
1. Tuition and Materials:		$ 5.00	1. Income gain:	40%	$960.00
2. Travel Costs:		$ 10.00	2. Value of information learned in class:		$525.00
3. Other (supplies, books, etc.):		--	3. Employer paying for course:	50%	$146.50
4. Loss of part-time job:	33%		4. Socializing:	33%	
Lost Income:		?	5. Satisfied with course:	100%	
5. Not satisfied with course:	0%		6. Increased satisfaction with their job:	100%	
6. Loss of one night per week:	17%		7. A night out per week:	83%	
			8. Updated or new job skills:	50%	
TOTAL:		$ 8.33+	TOTAL:		$1,631.50

G. Social:

COSTS			BENEFITS		
1. Instructor salary:		$150.98	1. Tuition & material fees:		$111.50
2. Clerical cost:		--	2. Satisfied with course:	100%	
3. Supervisory salary:		$ 30.00+	3. Increased satisfaction on the job:	100%	
4. Building rental:		$ 91.50	4. Value of information learned in the course to the student:		$525.00
5. Advertisement:		?	5. More knowledgeable society (personal information):	17%	
6. Decreased community involvement by students:	17%		6. Retrained or updated employee skills:	50%	
7. Not satisfied with course:	0%				
8. Lack of proper attendance:	?				
TOTAL:		$272.48+	TOTAL:		$636.50

H. The cost of this course was: 0 too high; 6 just right; 0 too low.

TABLE 75

COSMETOLOGY REVIEW - LTI

A. Number of Respondents: 11

B. Number of Respondents having taken previous courses: 7

C. Number of Respondents taking their first course: 4

D. Employed:	9	Unemployed:	2
1. Full time	4	1. In school	0
2. Part time	5	2. Homemaker	0
		3. Looking for a job	1
		4. Other	2

E. Reasons for taking the course:	
1. Related to my job	11
2. Personal information (not related to my job)	0
3. To update my skills	7
4. Retraining for my job	3
5. Training for another job	1
6. Other	1

F. Student:

COSTS		
1. Tuition and Materials:		$ 38.60
2. Travel Costs:		$ 15.36
3. Other (supplies, books, etc.):		--
4. Loss of part-time job:	0%	
Lost Income:		--
5. Not satisfied with course:	18%	
6. Loss of one night per week:	36%	
TOTAL:		$ 43.43

BENEFITS		
1. Income gain:	11%	?
2. Value of information learned in class:		$ 73.50
3. Employer paying for course:	0%	--
4. Socializing:	45%	
5. Satisfied with course:	82%	
6. Increased satisfaction with their job:	89%	
7. A night out per week:	64%	
8. Updated or new job skills:	100%	
TOTAL:		$ 73.50+

G. Social:

COSTS		
1. Instructor salary:		$ 96.50
2. Clerical cost:		--
3. Supervisory salary:		$ 30.00+
4. Building rental:		$ 75.00
5. Advertisement:		?
6. Decreased community involvement by students:	10%	
7. Not satisfied with course:	18%	
8. Lack of proper attendance:	?	
TOTAL:		$201.50+

BENEFITS		
1. Tuition & material fees:		$791.30
2. Satisfied with course:	82%	
3. Increased satisfaction on the job:	89%	
4. Value of information learned in the course to the student:		$ 73.50
5. More knowledgeable society (personal information):	0%	
6. Retrained or updated employee skills:	100%	
TOTAL:		$864.80

H. The cost of this course was: 1 too high; 9 just right; 0 too low.

TABLE 76

FIREARMS TRAINING - MPTI

A. Number of Respondents: 7

B. Number of Respondents having taken previous courses: 6

C. Number of Respondents taking their first course: 1

D. Employed:	7	Unemployed:	0
1. Full time	7	1. In school	0
2. Part time	0	2. Homemaker	0
		3. Looking for a job	0
		4. Other	0

E. Reasons for taking the course:	
1. Related to my job	7
2. Personal information (not related to my job)	0
3. To update my skills	4
4. Retraining for my job	2
5. Training for another job	0
6. Other	0

F. Student: COSTS			BENEFITS		
1. Tuition and Materials:		$ 5.00	1. Income gain:	14%	$604.80
2. Travel Costs:		$ 33.83	2. Value of information learned in class:		$311.66
3. Other (supplies, books, etc.):		?	3. Employer paying for course:	43%	$ 27.86
4. Loss of part-time job:	14%		4. Socializing:	67%	
Lost Income:		?	5. Satisfied with course:	100%	
5. Not satisfied with course:			6. Increased satisfaction with their job:	86%	
6. Loss of one night per week:	29%		7. A night out per week:	71%	
			8. Updated or new job skills:	86%	
TOTAL:		$ 38.83	TOTAL:		$944.32

G. Social: COSTS			BENEFITS		
1. Instructor salary:		?	1. Tuition & material fees:		$155.00
2. Clerical cost:		$ 69.75	2. Satisfied with course:	100%	
3. Supervisory salary:		$ 70.00	3. Increased satisfaction on the job:	86%	
4. Building rental:		$ 17.00	4. Value of information learned in the course to the student:		$311.66
5. Advertisement:		?	5. More knowledgeable society (personal information):	0%	
6. Decreased community involvement by students:	14%		6. Retrained or updated employee skills:	86%	
7. Not satisfied with course:	0%				
8. Lack of proper attendance:	?				
TOTAL:		$156.75	TOTAL:		$466.66

H. The cost of this course was: 1 too high; 4 just right; 0 too low.

TABLE 77

RIGHTS OF AGE - MPTI

A. Number of Respondents: 6

B. Number of Respondents having taken previous courses: 3

C. Number of Respondents taking their first course: 3

D. Employed: 5

1.	Full time	2
2.	Part time	3

Unemployed: 1

1.	In school	0
2.	Homemaker	0
3.	Looking for a job	1
4.	Other	0

E. Reasons for taking the course:

1.	Related to my job	6
2.	Personal information (not related to my job)	2
3.	To update my skills	5
4.	Retraining for my job	3
5.	Training for another job	0
6.	Other	0

F. Student:

	COSTS		
1.	Tuition and Materials:		$ 20.00
2.	Travel Costs:		$ 4.00
3.	Other (supplies, books, etc.):		$120.00
4.	Loss of part-time job:	0%	
	Lost Income:		--
5.	Not satisfied with course:	0%	
6.	Loss of one night per week:	17%	
	TOTAL:		$ 74.00

	BENEFITS		
1.	Income gain:	0%	--
2.	Value of information learned in class:		$300.00
3.	Employer paying for course:	67%	$ 16.67
4.	Socializing:	83%	
5.	Satisfied with course:	100%	
6.	Increased satisfaction with their job:	100%	
7.	A night out per week:	83%	
8.	Updated or new job skills:	100%	
	TOTAL:		$316.67

G. Social:

	COSTS		
1.	Instructor salary:		$ 93.80
2.	Clerical cost:		$ 30.00
3.	Supervisory salary:		$ 70.00
4.	Building rental:		$ 10.00
5.	Advertisement:		?
6.	Decreased community involvement by students:	0%	
7.	Not satisfied with course:	0%	
8.	Lack of proper attendance:	?	
	TOTAL:		$203.80

	BENEFITS		
1.	Tuition & material fees:		$240.00
2.	Satisfied with course:	100%	
3.	Increased satisfaction on the job:	100%	
4.	Value of information learned in the course to the student:		$300.00
5.	More knowledgeable society (personal information):	33%	
6.	Retrained or updated employee skills:	100%	
	TOTAL:		$540.00

H. The cost of this course was: 0 too high; 3 just right; 1 too low.

TABLE 78

BASIC LIFE SUPPORT - MPTI

A. Number of Respondents: 17

B. Number of Respondents having taken previous courses: 8

C. Number of Respondents taking their first course: 9

D. Employed:	15	Unemployed:	2
1. Full time	14	1. In school	0
2. Part time	1	2. Homemaker	2
		3. Looking for a job	0
		4. Other	1

E. Reasons for taking the course:	
1. Related to my job	11
2. Personal information (not related to my job)	9
3. To update my skills	9
4. Retraining for my job	0
5. Training for another job	0
6. Other	0

F. Student: COSTS			BENEFITS		
1. Tuition and Materials:		$ 4.76	1. Income gain:	0%	--
2. Travel Costs:		$ 6.58	2. Value of information learned in class:		$ 62.50
3. Other (supplies, books, etc.):		--	3. Employer paying for course:	59%	$ 2.38
4. Loss of part-time job:	6%		4. Socializing:	44%	
Lost Income:		?	5. Satisfied with course:	94%	
5. Not satisfied with course:	6%		6. Increased satisfaction with their job:	36%	
6. Loss of one night per week:	0%		7. A night out per week:	15%	
			8. Updated or new job skills:	53%	
TOTAL:		$ 7.32	TOTAL:		$ 64.88

G. Social: COSTS			BENEFITS		
1. Instructor salary:		$ 75.60	1. Tuition & material fees:		$ 53.79
2. Clerical cost:		$ 25.43	2. Satisfied with course:	94%	
3. Supervisory salary:		$ 70.00	3. Increased satisfaction on the job:	36%	
4. Building rental:		$ 20.00	4. Value of information learned in the course to the student:		$ 62.50
5. Advertisement:		?	5. More knowledgeable society (personal information):	53%	
6. Decreased community involvement by students:	6%		6. Retrained or updated employee skills:	53%	
7. Not satisfied with course:	6%				
8. Lack of proper attendance:	?				
TOTAL:		$191.03	TOTAL:		$116.29

H. The cost of this course was: 1 too high; 12 just right; 3 too low.

TABLE 79

SIGN LANGUAGE - LTI

A. Number of Respondents: 4

B. Number of Respondents having taken previous courses: 2

C. Number of Respondents taking their first course: 2

D. Employed: 3
1. Full time 3
2. Part time 0

Unemployed: 1
1. In school 0
2. Homemaker 1
3. Looking for a job 0
4. Other 1

E. Reasons for taking the course:
1. Related to my job 1
2. Personal information (not related to my job) 2
3. To update my skills 2
4. Retraining for my job 1
5. Training for another job 0
6. Other 3

F. Student: COSTS
1. Tuition and Materials: $ 9.13
2. Travel Costs: $ 39.33
3. Other (supplies, books, etc.): $ 4.25
4. Loss of part-time job: 0%
   Lost Income: --
5. Not satisfied with course: 0%
6. Loss of one night per week: 0%

TOTAL: $ 40.75

BENEFITS
1. Income gain: 0% --
2. Value of information learned in class: $ 25.00
3. Employer paying for course: 0% --
4. Socializing: 50%
5. Satisfied with course: 100%
6. Increased satisfaction with their job: 0%
7. A night out per week: 100%
8. Updated or new job skills: 75%

TOTAL: $ 25.00

G. Social: COSTS
1. Instructor salary: $180.00
2. Clerical cost: --
3. Supervisory salary: $ 30.00+
4. Building rental: $ 75.00
5. Advertisement: ?
6. Decreased community involvement by students: 0%
7. Not satisfied with course: 0%
8. Lack of proper attendance: ?

TOTAL: $285.00+

BENEFITS
1. Tuition & material fees: $109.56
2. Satisfied with course: 100%
3. Increased satisfaction on the job: 0%
4. Value of information learned in the course to the student: $ 25.00
5. More knowledgeable society (personal information): 50%
6. Retrained or updated employee skills: 75%

TOTAL: $134.56

H. The cost of this course was: 0 too high; 3 just right; 0 too low.

TABLE 80

CREATIVE WRITING - MPTI

A. Number of Respondents: 9

B. Number of Respondents having taken previous courses: 8

C. Number of Respondents taking their first course: 1

D.

Employed:	5	Unemployed:	3
1. Full time	4	1. In school	0
2. Part time	1	2. Homemaker	2
		3. Looking for a job	1
		4. Other	0

E. Reasons for taking the course:

1. Related to my job	0
2. Personal information (not related to my job)	5
3. To update my skills	3
4. Retraining for my job	0
5. Training for another job	2
6. Other	4

F. Student:

COSTS		
1. Tuition and Materials:		$ 10.00
2. Travel Costs:		$ 7.00
3. Other (supplies, books, etc.):		$ 13.00
4. Loss of part-time job:	0%	
Lost Income:		--
5. Not satisfied with course:	0%	
6. Loss of one night per week:	11%	
TOTAL:		$ 18.50

BENEFITS		
1. Income gain:	0%	--
2. Value of information learned in class:		?
3. Employer paying for course:	0%	--
4. Socializing:	75%	
5. Satisfied with course:	100%	
6. Increased satisfaction with their job:	40%	
7. A night out per week:	89%	
8. Updated or new job skills:	56%	
TOTAL:		?

G. Social:

COSTS		
1. Instructor salary:		$121.33
2. Clerical cost:		$ 27.00
3. Supervisory salary:		$ 70.00
4. Building rental:		$ 46.50
5. Advertisement:		?
6. Decreased community involvement by students:	33%	
7. Not satisfied with course:	0%	
8. Lack of proper attendance:	?	
TOTAL:		$264.83

BENEFITS		
1. Tuition & material fees:		$120.00
2. Satisfied with course:	100%	
3. Increased satisfaction on the job:	40%	
4. Value of information learned in the course to the student:		?
5. More knowledgeable society (personal information):	56%	
6. Retrained or updated employee skills:	56%	
TOTAL:		$120.00+

H. The cost of this course was: 1 too high; 7 just right; 0 too low.

TABLE 81

READING ACCELERATION - LTI

A. Number of Respondents: 3

B. Number of Respondents having taken previous courses: 2

C. Number of Respondents taking their first course: 1

D.				
Employed:	3		Unemployed:	0
1. Full time		2	1. In school	0
2. Part time		1	2. Homemaker	0
			3. Looking for a job	0
			4. Other	0

E. Reasons for taking the course:

1. Related to my job	1
2. Personal information (not related to my job)	3
3. To update my skills	1
4. Retraining for my job	0
5. Training for another job	0
6. Other	0

F. Student:

COSTS			BENEFITS		
1. Tuition and Materials:		$ 11.00	1. Income gain:	0%	--
2. Travel Costs:		$ 17.50	2. Value of information learned in class:		$ 51.33
3. Other (supplies, books, etc.):		--	3. Employer paying for course:	0%	--
4. Loss of part-time job:	0%		4. Socializing:	67%	
Lost Income:		--	5. Satisfied with course:	67%	
5. Not satisfied with course:	33%		6. Increased satisfaction with their job:	33%	
6. Loss of one night per week:	33%		7. A night out per week:	67%	
			8. Updated or new job skills:	33%	
TOTAL:		$ 22.67	TOTAL:		$ 51.33

G. Social:

COSTS			BENEFITS		
1. Instructor salary:		$108.89	1. Tuition & material fees:		$146.30
2. Clerical cost:		--	2. Satisfied with course:	67%	
3. Supervisory salary:		$ 30.00+	3. Increased satisfaction on the job:	33%	
4. Building rental:		$ 46.50	4. Value of information learned in the course to the student:		$ 51.33
5. Advertisement:		?	5. More knowledgeable society (personal information):	100%	
6. Decreased community involvement by students:	33%		6. Retrained or updated employee skills:	33%	
7. Not satisfied with course:	33%				
8. Lack of proper attendance:	?				
TOTAL:		$185.39+	TOTAL:		$197.63

H. The cost of this course was: 1 too high; 2 just right; 0 too low.

TABLE 82

METRIC SYSTEM - MPTI

A. Number of Respondents: 11

B. Number of Respondents having taken previous courses: 9

C. Number of Respondents taking their first course: 2

D. Employed: 10
1. Full time 8
2. Part time 2

Unemployed: 1
1. In school 1
2. Homemaker 2
3. Looking for a job 0
4. Other 0

E. Reasons for taking the course:
1. Related to my job 9
2. Personal information (not related to my job) 5
3. To update my skills 7
4. Retraining for my job 2
5. Training for another job 0
6. Other 1

F. Student:

COSTS		
1. Tuition and Materials:		$ 9.75
2. Travel Costs:		$ 6.60
3. Other (supplies, books, etc.):		$ 15.00
4. Loss of part-time job:	18%	
Lost Income:		?
5. Not satisfied with course:	9%	
6. Loss of one night per week:	0%	
TOTAL:		$ 15.75+

BENEFITS		
1. Income gain:	9%	$ 54.00
2. Value of information learned in class:		?
3. Employer paying for course:	18%	$ 3.70
4. Socializing:	50%	
5. Satisfied with course:	91%	
6. Increased satisfaction with their job:	30%	
7. A night out per week:	100%	
8. Updated or new job skills:	82%	
TOTAL:		$ 57.70

G. Social:

COSTS		
1. Instructor salary:		$101.39
2. Clerical cost:		$ 26.33
3. Supervisory salary:		$ 70.00
4. Building rental:		$ 35.50
5. Advertisement:		?
6. Decreased community involvement by students:	20%	
7. Not satisfied with course:	9%	
8. Lack of proper attendance:	?	
TOTAL:		$233.22

BENEFITS		
1. Tuition & material fees:		$114.08
2. Satisfied with course:	91%	
3. Increased satisfaction on the job:	30%	
4. Value of information learned in the course to the student:		?
5. More knowledgeable society (personal information):	45%	
6. Retrained or updated employee skills:	82%	
TOTAL:		$114.08+

H. The cost of this course was: 1 too high; 8 just right; 1 too low.

TABLE 83

HIGH SCHOOL CHEMISTRY - LTI

A. Number of Respondents: 4

B. Number of Respondents having taken previous courses: 3

C. Number of Respondents taking their first course: 1

D. Employed:	1	Unemployed:	3
1. Full time	1	1. In school	2
2. Part time	0	2. Homemaker	2
		3. Looking for a job	1
		4. Other	0

E. Reasons for taking the course:

1. Related to my job	2
2. Personal information (not related to my job)	1
3. To update my skills	1
4. Retraining for my job	0
5. Training for another job	0
6. Other	3

F. Student:

COSTS		
1. Tuition and Materials:		$ 25.13
2. Travel Costs:		$ 27.75
3. Other (supplies, books, etc.):		$ 8.50
4. Loss of part-time job:	0%	
Lost Income:		--
5. Not satisfied with course:	0%	
6. Loss of one night per week:	0%	
TOTAL:		$ 55.00

BENEFITS		
1. Income gain:	0%	--
2. Value of information learned in class:		$ 42.50
3. Employer paying for course:	0%	--
4. Socializing:	75%	
5. Satisfied with course:	100%	
6. Increased satisfaction with their job:	67%	
7. A night out per week:	100%	
8. Updated or new job skills:	25%	
TOTAL:		$ 42.50

G. Social:

COSTS		
1. Instructor salary:		$348.00
2. Clerical cost:		--
3. Supervisory salary:		$ 30.00+
4. Building rental:		$145.00
5. Advertisement:		?
6. Decreased community involvement by students:	0%	
7. Not satisfied with course:	0%	
8. Lack of proper attendance:	?	
TOTAL:		$523.00+

BENEFITS		
1. Tuition & material fees:		$188.48
2. Satisfied with course:	100%	
3. Increased satisfaction on the job:	67%	
4. Value of information learned in the course to the student:		$ 42.50
5. More knowledgeable society (personal information):	25%	
6. Retrained or updated employee skills:	25%	
TOTAL:		$230.98

H. The cost of this course was: 1 too high; 3 just right; 0 too low.

TABLE 84

FIRST AID & PERSONAL SAFETY - MPTI

A. Number of Respondents: 6

B. Number of Respondents having taken previous courses: 3

C. Number of Respondents taking their first course: 3

D. Employed:	5	Unemployed:	1
1. Full time	5	1. In school	0
2. Part time	0	2. Homemaker	1
		3. Looking for a job	0
		4. Other	0

E. Reasons for taking the course:	
1. Related to my job	3
2. Personal information (not related to my job)	1
3. To update my skills	1
4. Retraining for my job	1
5. Training for another job	0
6. Other	2

F. Student: COSTS			BENEFITS		
1. Tuition and Materials:		$ 8.50	1. Income gain:	0%	--
2. Travel Costs:		$ 6.00	2. Value of information learned in class:		?
3. Other (supplies, books, etc.):		$ 18.00	3. Employer paying for course:	33%	$ 2.83
4. Loss of part-time job:	0%		4. Socializing:		
Lost Income:		--	5. Satisfied with course:	100%	
5. Not satisfied with course:	0%		6. Increased satisfaction with their job:	50%	
6. Loss of one night per week:	0%		7. A night out per week:	100%	
			8. Updated or new job skills:	33%	
TOTAL:		$ 18.50	TOTAL:		$ 2.83+

G. Social: COSTS			BENEFITS		
1. Instructor salary:		$ 80.41	1. Tuition & material fees:		$120.70
2. Clerical cost:		$ 31.95	2. Satisfied with course:	100%	
3. Supervisory salary:		$ 70.00	3. Increased satisfaction on the job:	50%	
4. Building rental:		$ 24.50	4. Value of information learned in the course to the student:		?
5. Advertisement:		?	5. More knowledgeable society (personal information):	17%	
6. Decreased community involvement by students:	0%		6. Retrained or updated employee skills:	33%	
7. Not satisfied with course:	0%				
8. Lack of proper attendance:	?				
TOTAL:		$206.86	TOTAL:		$120.70

H. The cost of this course was: 1 too high; 3 just right; 0 too low.

TABLE 85

DRIVERS EDUCATION - LTI

A. Number of Respondents: 6

B. Number of Respondents having taken previous courses: 2

C. Number of Respondents taking their first course: 4

D. Employed: 4
  1. Full time 1
  2. Part time 3

Unemployed: 2
  1. In school 0
  2. Homemaker 3
  3. Looking for a job 1
  4. Other 0

E. Reasons for taking the course:

1. Related to my job	2
2. Personal information (not related to my job)	2
3. To update my skills	0
4. Retraining for my job	0
5. Training for another job	1
6. Other	2

F. Student:

COSTS		
1. Tuition and Materials:		$ 25.92
2. Travel Costs:		$ 15.00
3. Other (supplies, books, etc.):		$ 42.50
4. Loss of part-time job:	0%	
Lost Income:		--
5. Not satisfied with course:	0%	
6. Loss of one night per week:	0%	
TOTAL:		$ 45.08

BENEFITS		
1. Income gain:	0%	--
2. Value of information learned in class:		$ 43.33
3. Employer paying for course:	0%	--
4. Socializing:	33%	
5. Satisfied with course:	100%	
6. Increased satisfaction with their job:	50%	
7. A night out per week:	100%	
8. Updated or new job skills:	17%	
TOTAL:		$ 43.33

G. Social:

COSTS		
1. Instructor salary:		$141.35
2. Clerical cost:		--
3. Supervisory salary:		$ 30.00+
4. Building rental:		$ 35.00
5. Advertisement:		?
6. Decreased community involvement by students:	0%	
7. Not satisfied with course:	0%	
8. Lack of proper attendance:	?	
TOTAL:		$206.35+

BENEFITS		
1. Tuition & material fees:		$290.30
2. Satisfied with course:	100%	
3. Increased satisfaction on the job:	50%	
4. Value of information learned in the course to the student:		$ 43.33
5. More knowledgeable society (personal information):	33%	
6. Retrained or updated employee skills:	17%	
TOTAL:		$333.63

H. The cost of this course was: 0 too high; 6 just right; 0 too low.

TABLE 86

DEFENSIVE DRIVING - LTI

A. Number of Respondents: 4

B. Number of Respondents having taken previous courses: 2

C. Number of Respondents taking their first course: 2

D. Employed:	3	Unemployed:	1
1. Full time	2	1. In school	1
2. Part time	2	2. Homemaker	0
		3. Looking for a job	0
		4. Other	0

E. Reasons for taking the course:

1. Related to my job	2
2. Personal information (not related to my job)	0
3. To update my skills	0
4. Retraining for my job	0
5. Training for another job	0
6. Other	2

F. Student:

COSTS			BENEFITS		
1. Tuition and Materials:		$ 6.80	1. Income gain:	0%	--
2. Travel Costs:		?	2. Value of information learned in class:		?
3. Other (supplies, books, etc.):		--	3. Employer paying for course:	67%	$ 4.53
4. Loss of part-time job:	0%		4. Socializing:	0%	
Lost Income:		--	5. Satisfied with course:	100%	
5. Not satisfied with course:	0%		6. Increased satisfaction with their job:	67%	
6. Loss of one night per week:	33%		7. A night out per week:	66%	
			8. Updated or new job skills:	0%	
TOTAL:		$ 6.80+	TOTAL:		$ 4.53+

G. Social:

COSTS			BENEFITS		
1. Instructor salary:		$ 52.00	1. Tuition & material fees:		$ 36.04
2. Clerical cost:		--	2. Satisfied with course:	100%	
3. Supervisory salary:		$ 30.00+	3. Increased satisfaction on the job:	67%	
4. Building rental:		$ 20.00	4. Value of information learned in the course to the student:		?
5. Advertisement:		?	5. More knowledgeable society (personal information):	0%	
6. Decreased community involvement by students:	0%		6. Retrained or updated employee skills:	0%	
7. Not satisfied with course:	0%				
8. Lack of proper attendance:	?				
TOTAL:		$102.00+	TOTAL:		$ 36.04+

H. The cost of this course was: 0 too high; 1 just right; 0 too low.

CONCLUSIONS, RECOMMENDATIONS, & BIBLIOGRAPHY

CONCLUSIONS

1) The benefits of a vocational-technical education program outweigh the costs of the program for both the student and for society in general.

2) The benefits [illegible] aidable, noncredit adult education courses outweigh the costs of such courses for both the student and for society in general.

3) The benefits of a vocational-technical education should be assumed to exist for ten years after the completion of the vocational-technical program. At the end of ten years, it is assumed that such variables as labor union effectiveness and outdated educational information will tend to minimize any benefits remaining from the vocational-technical program. Ten years is an arbitrary figure, however, and it should be understood that other variables could expand or decrease this time span for benefits.

4) Any Cost Benefit Study is tied to a particular time span, the time span used for collecting the benefits and the costs. The time span for this particular study is the school years 1974-75 and 1975-76. All of the information collected and used in this study pertains to these two school years.

5) One of the major problems in conducting a Cost Benefit Study is how to handle general education courses and elective courses. A method needs to be developed to adequately allocate the costs of these courses back to the programs in which the students are enrolled.

6) At the present time, most costs are accounted for on a department or division basis. In order to further refine the Cost Benefit Model and to improve its accuracy, it becomes necessary to account for costs on a program basis. Data that needs to be included on a program basis includes equipment purchases, salaries, supplies, miscellaneous expenses, FTEs and SPEs, the number and size of courses offered, the number of enrollments versus the number of graduates, etc. The closer expenditures (costs) can correspond to the programs to which they relate, the fewer cost allocation assumptions need to be made, and the accuracy of the final cost benefit data will be much greater.

7) In general, older and more established programs are more economical than newer programs. This is especially true if direct allocation of equipment is to be used.

8) In reviewing the results of the nine test programs, it can be concluded that the average Payback Period for society is 4.28 years and for a student, it is 2.71 years. Furthermore, the Present Value of the Benefits of a vocational-technical program equals $11,626.00 for society in general and $11,927.00 for the individual student; the Rate of Return for society is 46% and

for the student it is 62%; and finally, the Cost Benefit Ratio for society is $\frac{2.70}{1.00}$ and for the individual student it is $\frac{2.19}{1.00}$.

9) In reviewing the results of the sixty-three test courses, it can be concluded that the courses are both economically and noneconomically very beneficial for the individual student at all three participating schools. In studying the social costs and benefits, one can notice that economically the costs and benefits of the courses are nearly equal and that the noneconomic benefits to society are much greater than the noneconomic costs.

10) Finally, it can be concluded that Cost Benefit Studies can be conducted on programs and courses provided the school is able to supply the following information:

    a) List of aidable adult education courses, excluding Associate Degree and Vocational Diploma.

    b) Name of full-time programs to be evaluated.

    c) Names and addresses of graduates from the full-time programs that are selected.

    d) Names and addresses of high school graduates. They may be available from area LVECs.

    e) Course lists, including names and addresses, for each of the aidable adult education courses selected.

    f) End-of-year expenses - used to determine the operating cost of the school.

    g) Personnel budget - need salaries of all instructors in the full-time and the part-time programs or courses.

    h) Course schedules, and enrollments by course and program for the full-time programs.

    i) Equipment appraisal for all equipment used by the full-time programs and the part-time courses.

    j) Total space in each school building, broken down by instructional space and auxiliary space.

    k) Copy of the six month follow-up instrument along with the results for the previous two years.

    l) The number of SPEs and the number of FTEs for the full-time programs and the part-time courses.

    m) Adult Education Supervisors Manual and Adult Education Course Catalogue.

RECOMMENDATIONS

1) In order to continue to refine the Cost Benefit Model, it is recommended that further research be conducted on the noneconomic costs and benefits of vocational-technical education to both society and to individual students. Two activities of special importance include the testing of the survey instrument presented in Illustration 7 for measuring such attitudes as Self-Acceptance, Education, and Employment, and a need to examine and test methods for conducting Cost Effectiveness Studies.

2) It is suggested that a source document be developed whereby persons using the Data Processing Center will know what information is available by computer. Information which should be stored on the computer includes: the number of FTEs and SPEs by program, the operating expenses of the school by program, equipment survey or distribution, salaries, cost of supplies by program, classes offered and the enrollment in the classes by program majors, student and graduate names and addresses, etc.

3) It is suggested that when further Cost Benefit Studies are to be conducted, the Cost Benefit Survey form be sent along with the six month follow-up survey instrument. This would lessen the cost of postage and assure that graduates do not feel overburdened by survey forms coming from the vocational-technical institute. It also prevents a duplication of time and effort spent in trying to locate graduates and getting them to respond.

4) In addition to Cost Benefit Studies and Cost Effectiveness Studies, it is suggested that thought be given to conducting studies on the Developmental Costs associated with new programs, and to conducting studies on the Marginal Costs of increasing or decreasing the enrollment in a particular course or program.

5) It is recommended that the usage of such resource or service departments as Data Processing, Word Processing, Duplicating, and the Library be recorded on a form similar to the one presented in Appendix F and used by the Media Center. By using the format and recording the usage of each department on the computer, greater efficiency and planning can be achieved and the costs of operating these departments can easily be allocated back to the programs using the department.

6) Finally, it is recommended that the information presented in this report be put into use, and that questions and ideas which may spring forth from its use be researched and evaluated in order to continually refine the Cost Benefit Model as presented.

BIBLIOGRAPHY

Arora, Mehar. Forms for Establishing Societal Costs and Benefits of Vocational and Manpower Programs. Center for Vocational, Technical and Adult Education, University of Wisconsin-Stout, Menomonie, Wisconsin. January, 1977.

Arora, Mehar. Manual for Establishing Societal Costs and Benefits of Vocational and Manpower Programs. Center for Vocational, Technical and Adult Education, University of Wisconsin-Stout, Menomonie, Wisconsin. November, 1975.

Bordini, Dominic J., William M. Sirek. Descriptive Cost-Benefit Studies of Selective Wisconsin VTAE Programs. Fox Valley Technical Institute, Appleton, Wisconsin. June, 1975.

Bowlby, Roger L. and William R. Schriver. Non Wage Benefits of Vocational Training: Employability and Mobility. The University of Tennessee, Knoxville, Tennessee. 1969.

Campus/Wisconsin. SDL Systems Research Group, Toronto, Canada. August, 1973.

Carroll, Adger B and Loren A. Ihnen. Costs and Returns of Technical Education: A Pilot Study. Department of Economics, North Carolina State University at Raleigh. July, 1966.

Corazzini, Arthur J. "The Decision to Invest in Vocational Education: An Analysis of Costs and Benefits", Journal of Human Resources, Vol. 3 (1968 supplement), pages 88-120.

Dahnke, Harold L., Dennis P. Jones, Thomas R. Mason, and Leonard C. Romney. Higher Education Facilities Planning and Management Manuals. Planning and Management Systems Division, Western Interstate Commission for Higher Education, Boulder, Colorado. November, 1970.

Davie, Bruce F. "Using Cost Benefit Analysis in Planning and Evaluating Vocational Education", a Paper prepared by David S. Bushnell, U.S. Office of Education, Georgetown University.

Ghazalah, Ismail A. The Role of Vocational Education in Improving Skills and Earning Capacity in the State of Ohio: A Cost-Benefit Study. Division of Business Research, College of Business Administration, Ohio University, Athens, Ohio. November, 1972.

Ghazalah, Ismail A. Vocational Education Planning Districts in Ohio: An Economic Evaluation of Foregone Benefits from Limited Participation. Department of Economics, Ohio University, Athens, Ohio. February, 1975.

Kaufman, Jacob J., Elchanan Cohn, Teh-wei Hu. The Cost of Vocational and Non-Vocational Programs: A Study of Michigan Secondary Schools. Institute for Research on Human Resources. The Pennsylvania State University, University Park, Pennsylvania. 1975.

Koopika, Bruce. Cost Benefit of Welding. Northeast Wisconsin Technical Institute, Green Bay, Wisconsin. June, 1974.

Lawrence, Ben, George Weathersby, and Virginia W. Patterson, ed. Outputs of Higher Education, Their Identification, Measurement, and Evaluation. Western Interstate Commission for Higher Education, Boulder, Colorado. July, 1970.

Marson, Arthur A., Arthur E. Weiner, Robert P. Sorensen, Ph.D. Cost Benefit Model Development. Moraine Park VTAE District, Fond du Lac, Wisconsin. July, 1976.

Marson, Arthur A., Arthur E. Weiner, Robert P. Sorensen, Ph.D. Cost Benefit Studies. Moraine Park VTAE District, Fond du Lac, Wisconsin. June, 1974.

Marzurek, John, William J. Becker, Jack Banerdt, and Keith Stoehr. Cost Benefit Study of Library Media Technical Assistant Program. Gateway Technical Institute, Kenosha, Wisconsin. June, 1974.

Mueller, Frederick. Private Economic Benefits vs. Private Economic Costs of Associate Degree Nursing Students Class of 1971-73. Milwaukee Area Technical College. July, 1974.

Peterson, Leroy J. Cost Benefit Theory - Vocational and Technical Education. Center for Studies in Vocational, Adult and Technical Education, University of Wisconsin, Madison. September, 1969.

Sewell, Susan, Daniel J. Wagner, and Ronald H. Anderson. Conceptual Framework for Conducting Cost-Benefit Studies in Wisconsin Vocational, Technical and Adult Education. Southwest Wisconsin Vocational-Technical Institute, Fennimore, Wisconsin. August, 1974.

Sewell, Susan, Daniel J. Wagner, and Ronald H. Anderson. Descriptive Cost Benefit Studies of Selected Wisconsin VTAE Programs. Southwest Wisconsin Vocational-Technical Institute, Fennimore, Wisconsin. June, 1974.

Taussig, Michael K. "An Economic Analysis of Vocational Education in the New York City High Schools". Journal of Human Resources, Vol. 3 (1968 supplement), pages 59-87.

Tempte, William. Descriptive Cost-Benefit Study. Western Wisconsin Technical Institute, La Crosse, Wisconsin. July, 1974.

Webb, Robert, Wayne R. Atkins, and Norbert Wurtzel. Conceptual Framework for Conducting Cost-Benefit Studies in Wisconsin VTAE and Cost-Benefit Studies - VTAE Programs. District One Technical Institute, Eau Claire, Wisconsin. July, 1974.

Winter, Walter and Richard Anderson. Cost-Benefit of Practical Nursing. Waukesha County Technical Institute, Pewaukee, Wisconsin. June, 1974.

Wisconsin Board of Vocational, Technical and Adult Education. Uniform Financial Accounting Manual, 3rd edition. February, 1975.

APPENDIX

APPENDIX A-1

Moraine Park Technical Institute
District Office 235 North National Avenue Fond du Lac, Wisconsin 54935 (414) 922-8611

March 16, 1977

Dear Former Student:

The Moraine Park Technical Institute, North Central Technical Institute, and the Lakeshore Technical Institute are cooperatively working on a Cost Benefit Study. The purpose of this study is to develop a model for determining the cost of vocational education for our students and for society in general, and to compare these costs to the benefits that are derived from them. Also, we hope to determine the benefits and costs associated with each of the individual programs that we offer at our campuses, in order that we may budget your tax dollars more wisely in selecting programs that will be economically beneficial for students and for society in the future.

With this goal in mind, the enclosed survey form was developed to obtain information that is necessary for the completion of this study. I would appreciate it very much if you would take a few minutes from your busy schedule to complete the survey form and to return it to me in the enclosed postage-paid envelope.

Be assured that the information you supply on the survey form is strictly confidential, and that the information will be released in such a manner that individual respondents cannot be identified.

A reply before March 31 would be appreciated. If further information is desired, please contact me at 922-8611, extension 372.

Thank you very much for your cooperation and assistance.

Sincerely,

Art Marson

Art Marson
Research Specialist

sr

Enclosures

An Equal Opportunity Employer/Educator functioning under an Affirmative Action Plan.
Moraine Park Vocational, Technical and Adult Education District
Robert P. Sorensen, Ph. D.
District Director

APPENDIX A-2

Moraine Park Technical Institute

District Office 235 North National Avenue Fond du Lac, Wisconsin 54935 (414) 922-8611

April 18, 1977

Dear Former Student:

As you may recall, the Moraine Park Technical Institute, North Central Technical Institute, and the Lakeshore Technical Institute are cooperatively working on a Cost Benefit Study. The purpose of this study is to develop a model for determining the cost of vocational education for our students and for society in general, and to compare these costs to the benefits that are derived from them. Also, we hope to determine the benefits and costs associated with each of the individual programs that we offer at our campuses, in order that we may budget your tax dollars more wisely in selecting programs that will be economically beneficial for students and for society in the future.

With this goal in mind, another survey form is enclosed to obtain information that is necessary for the completion of this study. I would appreciate it very much if you would take a few minutes from your busy schedule to complete the survey form and to return it to me in the enclosed postage-paid envelope.

Be assured that the information you supply on the survey form is strictly confidential, and that the information will be released in such a manner that individual respondents cannot be identified.

A reply before April 29 would be appreciated. If further information is desired, please contact me at 922-8611, extension 372.

Thank you very much for your cooperation and assistance.

Sincerely,

Art Marson

Art Marson
Research Specialist

tm

Enclosures

An Equal Opportunity Employer/Educator functioning under an Affirmative Action Plan.

Moraine Park Vocational, Technical and Adult Education District
Robert P. Sorensen, Ph. D.
District Director

APPENDIX A-3

March 31, 1977

Dear Former Student:

North Central Technical Institute and several other technical institutes are cooperatively working on a Cost Benefit Study. Through the study, we hope to determine the benefits and costs associated with vocational education and with each of the individual programs that we offer at our campuses. This should assist us in budgeting your tax dollars more wisely and selecting programs that will be economically beneficial for students and for society in the future.

With this goal in mind, the enclosed questionnaire was developed to obtain information that is necessary for the completion of this study. It would be appreciated very much if you would take a few minutes from your busy schedule to complete the questionnaire and to return it in the enclosed stamped envelope.

Be assured that the information you supply in the questionnaire is strictly confidential, and that the information will be released in such a manner that individual respondents cannot be identified.

A prompt reply would be appreciated. If further information is desired, please contact me at 675-3331 extension 288.

Thank you very much for your cooperation.

Sincerely,

Marvin Berg

Marvin Berg
Research Specialist
North Central Technical Institute

lb

Enclosures

APPENDIX A-4

COST BENEFIT FORM

VTAE GRADUATES

1. Check One: ____ Male ____ Female 2. Age: ____

3. ____ Married ____ Single ____ Divorced

4. Were you ____ MARRIED or ____ SINGLE when you attended MPTI or LTI?

5. Please describe your health:

   ____ excellent ____ very good ____ good ____ less than average
   ____ other

6. Describe your parents' occupation(s) according to the following:

   Father: ___ Blue Collar ___ White Collar ___ Retired ___ Farming
   Mother: ___ Blue Collar ___ White Collar ___ Farming ___ Homemaker

7. Please check all social organizations, clubs, etc., of which you are a member:

	Type of Organization	Number	Date(s) Joined
___	School Related Organizations		
___	Sportsman Clubs		
___	Church or Religious Organizations		
___	Social Clubs or Societies		
___	Volunteer Work		
___	Fraternal Organizations		
___	Community Services		

8. Did you vote in the presidential election in 1972? ___ Yes ___ No

   In 1976? ___ Yes ___ No Do you plan to vote in 1980? ___ Yes ___ No

9. In what year did you graduate from high school? ________

10. Type of high school program: ___ vocational ___ academic (college prep)

11. Please list ALL of your POST HIGH SCHOOL education. If your are currently in school, indicate your program major, the school you attend and the date you expect to graduate.

Course or Program	School	Date(s)

(over)

12. Did you receive any LOANS to defray the cost of your education?
___ Yes ___ No Amount: $___

13. While in school, did you receive any SCHOLARSHIPS or GRANTS?
___ Yes ___ No If yes, estimate the average annual income from these sources: $___

14. While in school, did you receive any . . .
Unemployment Compensation $___
Social Security $___
City, State or Federal Subsidy $___
Veterans Benefits $___

15. As a student, how much did you earn per year from part-time or full-time jobs? $___

16. How much did you spend per year on TUITION, BOOKS, and SCHOOL FEES?
$___

17. How much did you earn, before taxes, during the year prior to entering MPTI or LTI? $___

18. Where did you reside while attending school?
___ At Home ___ Private Room
___ Apartment ___ Other (Specify) ___

19. Please list the cost of the above residence. $___ per week $___ per mo

20. How many miles did you drive or walk to school? ___ miles

21. What is your present employment status?
___ Employed Full-time ___ Employed Part-time
___ Military Service ___ Unemployed

If you are unemployed, please explain: ___ Homemaker ___ School
___ Looking for a Job
___ Other: ___

22. Please list all jobs you have held since graduating from high school, and the length of time you held each job. Please treat each promotion as a new job. Begin with your present job first. If more than 10 jobs, 10 listings will be sufficient.

Job Title	Full Time	Part Time	Company	#Yrs.	Months

23. How long did it take to find a job in your field after graduating from MPTI or LTI? ___ Weeks

24. Do you consider your present job to be a permanent occupation? ___ Yes ___ No

25. How many hours do you work during an average week? _____ Hours Regular Time
_____ Hours Overtime

26. What was the starting annual salary you received in your first position after high school? $_______________ After leaving MPTI or LTI? $_____________

27. What is your current annual salary before taxes? $_______________

28. If you have an additional source of income besides the above listed job, please indicate your annual income from this source. $_______________
Source: ____

29. What was the total amount of Federal and State Income Taxes that you paid on income earned in the following years: (after deductions)

1970 $_____________________________ (taxes paid in 1971)
1971 $_____________________________ (taxes paid in 1972)
1972 $_____________________________ (taxes paid in 1973)
1973 $_____________________________ (taxes paid in 1974)
1974 $_____ ______________________ (taxes paid in 1975)

30. How satisfied are you with your present job?
___ very satisfied
___ fairly satisfied
___ average satisfaction
___ very little satisfaction
___ highly dissatisfied, but intend to stay on the job
___ highly dissatisfied, but intend to look for a new job

31. Were you out of work at any time (except for the time that you were in school): during 1975? ___ Yes ___ No During 1976? ___ Yes ___ No
If yes, how many weeks were you out of work? ________ Weeks
Amount of Unemployment Compensation received in 1975 $_________________
In 1976 $_________________

32. Do you think your occupational future will require you to get more training?
___ Yes ___ No If yes, what type of training?
___ Vocational
___ On-the-job
___ College
___ Other (please specify) ____

Do you intend to acquire this additional training: ___ Yes ___ No

33. Do you own your own home? ___ Yes ___ No If yes, the value of it is: $_________________

(over)

34. Please list all vacations you have taken during the previous two years (1975 and 1976) including business trips, family vacations, etc.

	DATE	TYPE OF TRIP		LENGTH OF TIME	LOCATION OF TRIP
		BUSINESS	PLEASURE		
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

35. COMMENTS:

Thank you very much for taking time to complete this survey form.

AM:mw
11/12/76

APPENDIX B-1

Moraine Park Technical Institute

District Office 235 North National Avenue Fond du Lac, Wisconsin 54935 (414) 922-8611

March 29, 1977

Dear Graduate of 1976:

The Moraine Park Technical Institute, with the cooperation of the ____________ High School, is conducting a follow-up study of 1976 high school graduates. The purpose of this follow-up study is to determine what changes have taken place in your life since graduation and to assist Moraine Park in conducting a Cost Benefit Study. This study is necessary in order to determine the cost of a vocational-technical education compared to the benefits received due to the education. With this information, the Moraine Park Technical Institute can wisely use your tax dollars in offering programs and courses that are beneficial to both our students and to society in general.

It would be greatly appreciated if you would take a few minutes from your busy schedule to complete the enclosed survey form. The information you supply on the form is strictly confidential and will be released only in such a manner that individual respondents cannot be identified.

Thank you very much for your cooperation. If you have any questions regarding this survey, please feel free to call me at 922-8611, extension 372.

Sincerely,

Art Marson

Art Marson
Research Specialist

ag

Enclosure

APPENDIX B-2

March 22, 1977

Dear Graduate of ____________ High School:

The North Central Technical Institute, with the cooperation of ____________ High School, is conducting a follow-up study of 1975 and 1976 high school graduates. The purpose of the follow-up study is to discover what changes have occurred in your life since your graduation and also to assist North Central Technical Institute in conducting a Cost Benefit Study. The purpose of the Cost Benefit Study is to determine the cost of vocational education in comparison to the benefits received. In this way, the Technical Institute can wisely use your tax dollars in offering courses that are beneficial to both our students and society in general.

It would be greatly appreciated if you would take a few minutes from your busy schedule to complete the enclosed questionnaire. Be assured that the information you supply in this questionnaire is strictly confidential and will be released only in such a manner that individual respondents cannot be identified.

Thank you very much for your cooperation. If you have any questions regarding this survey, please feel free to call me at 675-3331 extension 288.

Sincerely,

Marvin Berg

Marvin Berg
Research Specialist

Enclosure

lb

APPENDIX B-3

COST BENEFIT FORM

HIGH SCHOOL GRADUATE

1. Check One: ____Male ____Female 2. Age: ________

3. ____Married ____Single ____Divorced

4. Please describe your health:
____excellent ____very good ____good ___less than average ____poor

5. Describe your parents' occupations according to the following:

Father: __Blue Collar __Retired __White Collar __Farming
Mother: __Blue Collar __Farming __White Collar __Homemaker

6. Please list all social organizations, clubs, etc. of which you are a member.

Type of Organization	Number of Organizations	Date Joined
___ School Related Organization	________	________
___ Sportsman Clubs	________	________
___ Church or Religious Organizations	________	________
___ Social Clubs or Societies	________	________
___ Volunteer Work	________	________
___ Fraternal Organizations	________	________
___ Community Services	________	________

7. Did you vote in the presidential election in 1972? __Yes __No in 1976? __Yes __No
Do you plan to vote in 1980? __Yes __No

8. In what year did you graduate from high school? ______________

9. Type of high school program ____Vocational ____Academic (college prep)

10. Please list ALL of your POST-HIGH SCHOOL education. If you are currently in school, indicate your program major, the school you attend and the date you expect to graduate.

Course or Program	School	Date(s)

(over)

11. What is your present employment status?
____Employed Full-Time
____Military Service
____Employed Part-Time
____Unemployed
____Student
If you are unemployed, please explain: ____Homemaker ____School
____Looking for a Job
____Other: ____________________

12. Please list all jobs you have held since graduating from high school and the length of time you held each job. PLEASE TREAT EACH PROMOTION AS A NEW JOB. Begin with present job first. If more than eight jobs, eight listings will be sufficient.

Job Title	Full Time	Part Time	Company	#Yrs.	Months

13. Name of Employer: ____________________

Employer's Address: ____________________
City State

14. Do you consider your present job to be a permanent occupation? ________

15. How many hours do you work during an average week? ________hours regular
________hours overtime

16. What was the starting annual salary you received in your first position after high school? $____________

17. What is your current annual salary before taxes? $____________

18. If you have an additional source of income besides the above listed job, please indicate your annual income from this source. $________ Source: ________

19. How long did it take to find a job in your field after graduating from high school? ____________weeks

20. What was the total amount of Federal and State Income Taxes that you paid on income earned in the following years: (after deductions)

1971 $____________________(taxes paid in 1972)
1972 $____________________(taxes paid in 1973)
1973 $____________________(taxes paid in 1974)
1974 $____________________(taxes paid in 1975)
1975 $____________________(taxes paid in 1976)
1976 $____________________(taxes paid in 1977)

21. How satisfied are you with your present job?
____very satisfied
____fairly satisfied
____average satisfaction
____very little satisfaction
____highly dissatisfied, but intend to stay on the job
____highly dissatisfied, and intend to look for a new job

22. Were you out of work at any time (except for the time that you were in school) during 1975? ____Yes ____No during 1976? ____Yes _No
If yes, how many weeks were you out of work? ______________weeks

Amount of unemployment compensation received in 1975? $________________

In 1976? $__________________

23. Do you think your occupational future will require you to get more training?
____Yes _No If yes, what type of training?

____vocational-technical
____on-the-job
____college
____other (please specify) ____

Do you intend to acquire this additional training? ____Yes ____No

24. Do you own your own home? ____Yes ____No If yes, the value of it is $____________________

(over)

25. Please list all vacations you have taken during the previous two years (1975 and 1976) including business trips, family vacations, etc.

	DATE	TYPE OF TRIP BUSINESS	 PLEASURE	LENGTH OF TIME	LOCATION OF TRIP
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

COMMENTS:

Thank you very much for taking the time to complete this survey form.

APPENDIX C-1

Moraine Park Technical Institute
District Office 235 North National Avenue Fond du Lac, Wisconsin 54935 (414) 922-8611

March 7, 1977

Dear Former Student:

The Moraine Park Technical Institute, Lakeshore Technical Institute, and the North Central Technical Institute, working together in a consortium approach, are conducting a Cost Benefit Study. The purpose of this study is to determine what it cost to attend a course at a vocational-technical institute compared to the value of the benefits received from taking the course.

This information is required in order to more wisely budget your tax dollars in selecting courses and programs that will be beneficial for students and for society in the future.

With this goal in mind, the enclosed survey form was developed to obtain information necessary for the completion of this study. I would appreciate it very much if you would take a few minutes from your busy schedule to complete and return the survey form to me.

Be assured that the information you supply on the form is strictly confidential, and that the information will be released in such a manner that individual respondents cannot be identified.

A reply before March 25 would be appreciated. If further information is desired, please contact me at 922-8611, Ext. 372.

Thank you very much for your cooperation.

Sincerely,

Art Marson

Art Marson
Research Specialist

el

Enclosure

An Equal Opportunity Employer/Educator functioning under an Affirmative Action Plan.
Moraine Park Vocational, Technical and Adult Education District
Robert P. Sorensen, Ph. D.
District Director

APPENDIX C-2

Moraine Park Technical Institute
District Office 235 North National Avenue Fond du Lac, Wisconsin 54935 (414) 922-8611

March 23, 1977

Dear Former Student:

The Moraine Park Technical Institute, Lakeshore Technical Institute, and the North Central Technical Institute, working together in a consortium approach, are conducting a Cost Benefit Study. The purpose of this study is to determine what it cost to attend a course at a vocational-technical institute compared to the value of the benefits received from taking the course.

This information is required in order to more wisely budget your tax dollars in selecting courses and programs that will be beneficial for students and for society in the future.

With this goal in mind, the enclosed survey form was developed to obtain information necessary for the completion of this study. I would appreciate it very much if you would take a few minutes from your busy schedule to complete and return the survey form to me. A postage-paid envelope has been provided for your convenience.

Be assured that the information you supply on the form is strictly confidential, and that the information will be released in such a manner that individual respondents cannot be identified.

A reply before April 11 would be appreciated. If further information is desired, please contact me at 922-8611, Ext. 372.

Thank you very much for your cooperation.

Sincerely,

Art Marson
el

Art Marson
Research Specialist

el

Enclosure

An Equal Opportunity Employer/Educator functioning under an Affirmative Action Plan.
Moraine Park Vocational, Technical and Adult Education District
Robert P. Sorensen, Ph. D.
District Director

APPENDIX C-3

Moraine Park Technical Institute

District Office 235 North National Avenue Fond du Lac, Wisconsin 54935 (414) 922-8611

April 25, 1977

Dear Former Student,

The Moraine Park Technical Institute, Lakeshore Technical Institute, and the North Central Technical Institute, working together in a consortium approach, are conducting a Cost Benefit Study. The purpose of this study is to determine what it cost to attend a course at a vocational-technical institute compared to the value of the benefits received from taking the course.

This information is required in order to more wisely budget your tax dollars in selecting courses and programs that will be beneficial for students and for society in the future.

In order to complete this study, the enclosed survey form was developed. I would appreciate it very much if you would take a few minutes from your busy schedule to complete this survey form relating to the indicated course which you completed at the Lakeshore Technical Institute. A postage-paid envelope has been provided for your convenience in returning the form.

Be assured that the information you supply on the form is strictly confidential, and that the information will be released in such a manner that individual respondents cannot be identified.

A reply before May 6 would be appreciated. If further information is desired, please contact me at 922-8611, Ext. 372.

Thank you very much for your cooperation.

Sincerely,

Art Marson

Art Marson
Research Specialist

lkl

enclosure

An Equal Opportunity Employer/Educator functioning under an Affirmative Action Plan.
Moraine Park Vocational, Technical and Adult Education District
Robert P. Sorensen, Ph. D.
District Director

APPENDIX C-4

April 18, 1977

Dear Former Student:

North Central Technical Institute and several other technical institutes are cooperatively working on a Cost Benefit Study. Through the study, we hope to determine the benefits and costs associated with vocational education and with each of the individual programs that we offer at our campuses. This should assist us in budgeting your tax dollars more wisely and selecting programs that will be economically beneficial for students and for society in the future.

With this goal in mind, the enclosed questionnaire was developed to obtain information that is necessary for the completion of this study. It would be appreciated very much if you would take a few minutes from your busy schedule to complete the questionnaire and to return it in the enclosed stamped envelope.

Be assured that the information you supply in the questionnaire is strictly confidential, and that the information will be released in such a manner that individual respondents cannot be identified.

A prompt reply would be appreciated. If further information is desired, please contact me at 675-3331 extension 288.

Thank you very much for your cooperation.

Sincerely,

Marvin Berg

Marvin Berg
Research Specialist
North Central Technical Institute

lb

Enclosures

APPENDIX C-5

ADULT EDUCATION SURVEY FORM

1) Name: ____________________

2) Course taken in 1975-76: ____________________

3) Previous courses taken: Please list your four most recent courses.

   1. ____________________
   2. ____________________
   3. ____________________
   4. ____________________

4) Employed ☐ Unemployed ☐

   1. ☐ full-time
   2. ☐ part-time
   3. ☐ in school
   4. ☐ homemaker
   5. ☐ looking for a job
   6. ☐ other: ____________________

5) Reason for taking course listed in No. 2 above. (check all that apply)

   1. ☐ related to my job
   2. ☐ personal information - not related to my job
   3. ☐ to update my skills
   4. ☐ retraining for my job
   5. ☐ training for another job
   6. ☐ other (please specify) ____________________

6) Is one night a week at class a cost or a benefit to you?

   1. ☐ cost 2. ☐ benefit

7) Is socializing with other students an important part of this class?

   1. ☐ yes 2. ☐ no

8) Is your employer reimbursing you for this course?

   1. ☐ yes 2. ☐ no How much? __________

9) Are you giving up a part-time job to attend this course? 1. ☐ yes 2. ☐ no

   Type of Job: ____________________ Hours Worked per Week: __________

   Lost Income = $__________

10) Did you give up any community activities (clubs, volunteer work, etc.) in order to take this class?

   1. ☐ yes 2. ☐ no

   If yes, what type of community activity? ____________________

   How much time did you devote to this activity per week? __________hours

- over -

11) How satisfied are you with the course?

☐ very satisfied ☐ satisfied ☐ not satisfied

Comments: ______________________________

12) Did the course increase your satisfaction with your present job?

☐ yes ☐ no

13) From an economic point of view, how much did it cost you to take this course?

Travel back and forth to this course	$ ________
Tuition plus Materials cost	$ ________
Other costs	$ ________
(Please specify)	$ ________
	$ ________
TOTAL COST	$ ________

14) This cost was ☐ too high in relation to the information I learned.
☐ just right
☐ too low

15) What dollar value would you assign to the information learned in this course?

$ ________

16) Did taking this course increase your income from your job?

☐ yes ☐ no

Total gain in income per month = $ ________

THANK YOU VERY MUCH FOR COMPLETING THIS FORM!!!

APPENDIX D-1

Moraine Park Technical Institute
District Office 235 North National Avenue Fond du Lac, Wisconsin 54935 (414) 922-8611

May 13, 1977

Dear Employer:

The Moraine Park Technical Institute Research Department is currently conducting a Cost Benefit Study. The purpose of this study is to determine the cost of a vocational-technical education in comparison to the benefits that are received due to the education. In this way, MPTI can wisely use your tax dollars in offering courses that are beneficial to both our students and to society in general.

One of the major factors in this type of a study is to determine what effect MPTI graduates are having on the job market. Are they merely displacing a high school graduate in their job, or are they filling a vacuum that can only be filled by a person with the acquired talents of an MPTI graduate?

In order to determine the effect of our graduates on the job market, a survey form has been developed. It would be greatly appreciated if you would take a few minutes from your busy schedule to complete and return this form.

Be assured that the information you supply is strictly confidential and will be released only in such a manner that individual respondents cannot be identified.

Thank you very much for your cooperation.

Sincerely,

Art Marson

Art Marson
Research Specialist

sp

Enclosure

An Equal Opportunity Employer/Educator functioning under an Affirmative Action Plan.
Moraine Park Vocational, Technical and Adult Education District
Robert P. Sorensen, Ph. D.
District Director

APPENDIX D-2

"SURVEY FORM"

1) Graduate's Name: ____________________

2) Company Name: ____________________

Address: ____________________

3) Work Starting Date: ____________________

4) Starting Job Classification: ____________________

5) Starting Salary: $____________ per hour

$____________ per month

6) Present Job Classification: ____________________

7) Present Salary: $____________ per hour

$____________ per month

8) Would you hire a high school graduate with no additional training beyond high school for the above mentioned Starting Job Classification?

___Yes ___No Why? ____________________

____

____

____

If YES, would the high school graduate advance to the Present Job Classification listed above as rapidly as the MPTI graduate?

___Yes ___No Comments: ____________________

____

____

____

(OVER)

1) Has the above identified employee helped to improve your company's or business's rate of absenteeism?

☐ Yes ☐ No

2) What is the average stay on the job of the Vocational-Technical graduates you have hired? ____________________

Is this longer ☐ or shorter ☐ than the average stay on the job of all employees of your company or business?

3) Please rate the effectiveness of the above identified employee on the following:

	Good				Bad
a) preparation for his job	1	2	3	4	5
b) adjustment to his working situation	1	2	3	4	5
c) increase in company productivity	1	2	3	4	5

APPENDIX E

LIBRARY SURVEY OF USAGE LAKESHORE

PROGRAM	MINUTES IN LIBRARY	%
Accounting	4,200	14.5
Autobody Repair	40	.1
Auto Mechanics	120	.4
Business Machines	60	.2
CETA Program (MDTA)		
Child Care Assistant	150	.5
Clerk-Typist	415	1.4
Clothing Services	115	.4
Creative and Applied Mechanics		
Dairy Herdsman		
Drafting - Mechanical	123	.4
Electric Power Technology	3,555	12.3
Electronics Servicing	550	1.9
Electronics Technology	3,115	10.8
Fashion Merchandising	675	2.3
Graphic Arts		
Health Core		
Dental Assistant	470	1.6
Medical Assistant	1,710	5.9
Optometric Assistant	1,075	3.7
Ward Clerk	30	.1
Laboratory Optician		
Machine Tool Operation	130	.5
Marketing	1,376	4.8
Materials Management	4,130	14.3
Mechanical Design	55	.2
Medical Secretary	165	.6
Nursing Assistant		
Plastics Technology	640	2.2
Practical Nursing	1,365	4.7
Production Agriculture		
Secretarial Science	425	1.5
Stenography		
Welding	20	.1
ADN	1,335	4.6
Basic Electric		
Dispensing Optician	1,155	4.0
Electronics	530	1.8
Legal Assistant	1,145	4.0
Printing		
Police Science	25	.1
Apprentice		
Unknown	30	.1
TOTAL MINUTES:	28,929	

TIME SPAN: 1 week; Dec. 6-10, 1976

RESPONDENTS

MALE: 286

10?

FEMALE: 274

TOTAL: 570

REASON FOR USING THE LIBRARY:

Take Out Books	90
Return Books	30
Use of Resource Materials	64
Private or Group Study	369
Other	17
No Reply	15

AM:ls
5/31/77

LIBRARY SURVEY OF USAGE LAKESHORE

PROGRAM	MINUTES IN LIBRARY	%
Accounting	4,702	14.6
Autobody Repair	320	1.0
Auto Mechanics	385	1.2
Business Machines	60	.2
CETA Program (MDTA)	-----	----
Child Care Assistant	110	.3
Clerk-Typist	461	1.4
Clothing Services	75	.2
Creative and Applied Mechanics	-----	----
Dairy Herdsman	-----	----
Drafting - Mechanical	60	.2
Electric Power Technology	4,145	12.9
Electronics Servicing	250	.8
Electronics Technology	2,931	9.1
Fashion Merchandising	771	2.4
Graphic Arts	80	.2
Health Core	-----	----
Dental Assistant	1,035	3.2
Medical Assistant	1,255	3.9
Optometric Assistant	791	2.5
Ward Clerk	448	1.4
Laboratory Optician		
Machine Tool Operation	391	1.2
Marketing	2,075	6.4
Materials Management	3,095	9.6
Mechanical Design	525	1.6
Medical Secretary	180	.6
Nursing Assistant	-----	----
Plastics Technology	1,280	4.0
Practical Nursing	1,625	5.0
Production Agriculture	-----	----
Secretarial Science	850	2.6
Stenography	-----	----
Welding	-----	----
ADN	1,996	6.2
Basic Electric	-----	----
Dispensing Optician	1,140	3.5
Electronics	255	.8
Legal Assistant	785	2.4
Printing	-----	----
Police Science	60	.2
Apprentice		
Unknown	70	.2
TOTAL MINUTES:	32,206	99.8

TIME SPAN: 1 week; Jan. 4-10, 1977

RESPONDENTS

MALE:	299
FEMALE:	255
TOTAL:	554

REASON FOR USING THE LIBRARY:

Take Out Books	82
Return Books	40
Use of Resource Materials	128
Private or Group Study	318
Other	3
No Reply	7

AM:ls
5/31/77

LIBRARY SURVEY OF USAGE LAKESHORE

PROGRAM	MINUTES IN LIBRARY	%
Accounting	8,902	14.6
Autobody Repair	360	.6
Auto Mechanics	505	.8
Business Machines	120	.2
CETA Program (MDTA)		
Child Care Assistant	260	.4
Clerk-Typist	876	1.4
Clothing Services	190	.3
Creative and Applied Mechanics		
Dairy Herdsman		
Drafting - Mechanical	183	.3
Electric Power Technology	7,700	12.6
Electronics Servicing	800	1.3
Electronics Technology	6,046	9.9
Fashion Merchandising	,446	2.4
Graphic Arts	80	.1
Health Core		
Dental Assistant	1,505	2.5
Medical Assistant	2,965	4.8
Optometric Assistant	1,866	3.1
Ward Clerk	478	.8
Laboratory Optician		
Machine Tool Operation	521	.9
Marketing	3,451	5.6
Materials Management	7,225	11.8
Mechanical Design	500	.9
Medical Secretary	345	.6
Nursing Assistant		
Plastics Technology	1,920	3.1
Practical Nursing	2,990	4.9
Production Agriculture		
Secretarial Science	1,275	2.1
Stenography		
Welding	20	----
ADN	3,331	5.4
Basic Electric		
Dispensing Optician	2,295	3.8
Electronics	785	1.3
Legal Assistant	1,930	3.2
Printing		
Police Science	85	.1
Apprentice		
Unknown	100	.2
TOTAL MINUTES:	61,135	

TIME SPAN: 2 weeks; Dec. 6-10, Jan. 4-10, 1977

RESPONDENTS

MALE: 585

FEMALE: 10? 529

TOTAL: 1,124

REASON FOR USING THE LIBRARY:

Take Out Books 172

Return Books 70

Use of Resource Materials 192

Private or Group Study 687

Other 20

No Reply 22

AM:ls
5/31/77

LIBRARY SURVEY OF USAGE MPTI

PROGRAM	MINUTES IN LIBRARY	%
Account Clerk	299	.7
Accounting	5,052	11.3
Agricultural Mechanics	855	1.9
Auto Body	148	.3
Auto Mechanics	551	1.2
Child Care Assistant	838	1.9
Clerk Typist	1,553	3.5
Cosmetology		
Data Processing	1,469	3.3
Electronic Servicing	360	.8
Engine Technology	3,315	7.4
Food Manufacturing	2,914	6.5
Food Service Assistant	284	.6
Industrial Engineering Tech.	2,721	6.1
Industrial Marketing	872	1.9
Machine Tooling Technics		
Machine Tool Operation	520	1.2
Marketing	4,509	10.0
Marketing - Fashion Merch.	1,223	2.7
Mechanical Design	1,734	3.9
Mechanical Drafting	285	.6
Medical Records Tech.	1,341	3.0
Metal Fabrication		
Office Machine Repair	445	1.0
Operating Room Assistant	490	1.1
Police Science		
Practical Nursing	3,707	8.3
Production Agriculture		
Secretarial Science	2,138	4.8
Sec. Science - Medical	1,948	4.3
Small Engine - Chassis Mech.	89	.2
Supermarket Management	345	.8
Ward Clerk	1,176	2.6
Water & Wastewater Tech.	1,537	3.4
Welding		
Supervisor's Management	425	.9
Appliance Servicing	140	.3
Fire Science		
Farm Management Op.	10	---
Adult Education	315	.7
Visitor	110	.2
Unknown	1,065	2.4
Staff	104	.2
TOTAL MINUTES	44,837	

TIME SPAN: 1 week; Jan. 24-28, 1977

RESPONDENTS

MALE:	324
FEMALE:	367
TOTAL:	691

REASON FOR USING THE LIBRARY:

Take Out Books	26
Return Books	14
Use of Resource Materials	160
Private or Group Study	351
Other	121
No Reply	102

AM:ls
5/31/77

LIBRARY SURVEY OF USAGE MPTI

PROGRAM	MINUTES IN LIBRARY	%
Account Clerk	85	.3
Accounting	4,135	15.1
Agricultural Mechanics	155	.6
Auto Body	532	1.9
Auto Mechanics	288	1.1
Child Care Assistant	719	2.6
Clerk Typist	1,265	4.6
Cosmetology	60	.2
Data Processing	1,104	4.0
Electronic Servicing	325	1.2
Engine Technology	1,836	6.7
Food Manufacturing	2,098	7.7
Food Service Assistant	275	1.0
Industrial Engineering Tech.	2,666	9.7
Industrial Marketing	120	.4
Machine Tooling Technics		
Machine Tool Operation	190	.7
Marketing	1,957	7.1
Marketing - Fashion Merch.	120	.4
Mechanical Design	2,110	7.7
Mechanical Drafting	130	.5
Medical Records Tech.	1,160	4.2
Metal Fabrication		
Office Machine Repair	575	2.1
Operating Room Assistant	82	.3
Police Science		
Practical Nursing	795	2.9
Production Agriculture		
Secretarial Science	1,115	4.1
Sec. Science - Medical	702	2.6
Small Engine - Chassis Mech.	84	.3
Supermarket Management		
Ward Clerk	515	1.9
Water & Wastewater Tech.	1,023	3.7
Welding	105	.4
Supervisor's Management	172	.6
Appliance Servicing	60	.2
Fire Science	120	.4
Farm Management Op.		
Adult Education	190	.7
Visitor	60	.2
Unknown	432	1.6
Staff	60	.2
TOTAL MINUTES	27,420	

TIME SPAN: 1 week; Feb. 14-18, 1977

RESPONDENTS

MALE: 214

FEMALE: 224

TOTAL: 438

REASON FOR USING THE LIBRARY:

Take Out Books 11

Return Books 6

Use of Resource Materials 77

Private or Group Study 248

Other 72

No Reply 64

AM:ls
5/31/77

LIBRARY SURVEY OF USAGE

MPTI

PROGRAM	MINUTES IN LIBRARY	%
Account Clerk	220	.8
Accounting	3,636	12.4
Agricultural Mechanics	170	.6
Auto Body	60	.2
Auto Mechanics	726	2.5
Child Care Assistant	53	.2
Clerk Typist	1,468	5.0
Cosmetology	85	.3
Data Processing	635	2.2
Electronic Servicing	431	1.5
Engine Technology	1,243	4.2
Food Manufacturing	1,791	6.1
Food Service Assistant	70	.2
Industrial Engineering Tech.	2,986	10.2
Industrial Marketing	398	1.4
Machine Tooling Technics		
Machine Tool Operation	475	1.6
Marketing	1,555	5.3
Marketing - Fashion Merch.	1,110	3.8
Mechanical Design	1,239	4.2
Mechanical Drafting	100	.3
Medical Records Tech.	360	1.2
Metal Fabrication	70	.2
Office Machine Repair	555	1.9
Operating Room Assistant	100	.3
Police Science	46	2.
Practical Nursing	750	2.6
Production Agriculture		
Secretarial Science	593	2.0
Sec. Science - Medical	980	3.3
Small Engine - Chassis Mech.	396	1.4
Supermarket Management		
Ward Clerk	335	1.1
Water & Wastewater Tech.	3,055	10.4
Welding	250	.9
Supervisor's Management	319	1.1
Appliance Servicing	438	1.5
Fire Science		
Farm Management Op.		
Adult Education	1,688	5.8
Visitor	190	.6
Unknown	685	2.3
Staff		
TOTAL MINUTES	29,161	

TIME SPAN: 1 week; March 14-13, 1977

RESPONDENTS

MALE: 260

2?

FEMALE: 223

TOTAL: 485

REASON FOR USING THE LIBRARY:

Take Out Books	27
Return Books	23
Use of Resource Materials	75
Private or Group Study	226
Other	107
No Reply	88

AM:ls
5/31/77

LIBRARY SURVEY OF USAGE MPTI

PROGRAM	MINUTES IN LIBRARY	%
Account Clerk	604	.6
Accounting	12,823	12.6
Agricultural Mechanics	1,180	1.2
Auto Body	740	.7
Auto Mechanics	1,565	1.5
Child Care Assistant	1,610	1.6
Clerk Typist	4,286	4.2
Cosmetology	145	.1
Data Processing	3,208	3.2
Electronic Servicing	1,116	1.1
Engine Technology	6,394	6.3
Food Manufacturing	6,803	6.7
Food Service Assistant	629	.6
Industrial Engineering Tech.	8,373	8.2
Industrial Marketing	1,390	1.4
Machine Tooling Technics	11	
Machine Tool Operation	1,185	1.2
Marketing	8,021	7.9
Marketing - Fashion Merch.	2,453	2.4
Mechanical Design	5,083	5.0
Mechanical Drafting	515	.5
Medical Records Tech.	2,861	2.8
Metal Fabrication	70	.1
Office Machine Repair	1,575	1.6
Operating Room Assistant	672	.7
Police Science	46	----
Practical Nursing	5,924	5.8
Production Agriculture		
Secretarial Science	3,846	3.8
Sec. Science - Medical	3,630	3.6
Small Engine - Chassis Mech.	569	.6
Supermarket Management	345	.3
Ward Clerk	2,026	2.0
Water & Wastewater Tech.	5,615	5.5
Welding	355	.3
Supervisor's Management	916	.9
Appliance Servicing	638	.6
Fire Science	120	.1
Farm Management Op.	10	----
Adult Education	2,193	2.2
Visitor	360	.4
Unknown	2,182	2.1
Staff	164	.2
TOTAL MINUTES	101,568	

TIME SPAN: 3 weeks; Jan. 24-28, Feb. 14-18, Mar. 14-18, 1977

RESPONDENTS

MALE: 798
2?
FEMALE: 814
TOTAL: 1,614

REASON FOR USING THE LIBRARY:

Take Out Books 64
Return Books 43
Use of Resource Materials 312
Private or Group Study 825
Other 300
No Reply 254

AM:ls
5/31/77

MEDIA CENTER

WORK ORDER FORM

THIS FORM MUST BE FILLED OUT BEFORE ANY WORK CAN BE ACCEPTED OR COMPLETED BY THE MEDIA CENTER.

ORIGINATOR

Last Name and First Initial

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

DEPT. NO.

16	17

DATE SUBMITTED

Mo.			Day			Year	
		■			■		
18	19	■	20	21	■	22	23

DATE NEEDED

Mo.			Day			Year	
		■			■		
24	25	■	26	27	■	28	29

DATE COMPLETED

Mo.			Day			Year	
		■			■		
30	31	■	32	33	■	34	35

TYPE OF WORK (Use Job Sheet)

36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55

QUANTITY

56	57	58	59

TIME

Hour				Min.	
			■		
60	61	62	■	63	64

MATERIAL COST

Dollars						Cents	
					■		
65	66	67	68	69	■	70	71

Comments ____

____

____

____

____

____

____